

La profession infirmière en France et dans les pays de l'OCDE

Santé mentale et conditions de travail

Bibliographie thématique

Juin 2024

Centre de documentation de l'Irdes

Marie-Odile Safon

Véronique Suhard

Synthèses & Bibliographies

Reproduction sur d'autres sites interdite mais lien vers le document accepté
www.irdes.fr/documentation/syntheses-et-dossiers-bibliographiques.html

Sommaire

Problématique	2
Santé mentale, conditions de travail et histoire professionnelle	3
Addictions	91
Impact du covid-19 sur la santé mentale	102
Pour en savoir plus	132

Problématique

D'après le portrait des professions de santé¹, les infirmiers représentaient au 1^{er} janvier 2015 la première profession de santé en termes d'effectifs. Le répertoire Adeli recensait 638 200 infirmiers en activité en France. Il s'agissait là d'un maximum historique, que l'on considère les effectifs, en augmentation constante ou la densité (967 infirmiers pour 100 000 habitants), leur taux de croissance annuel depuis 2000 étant très supérieur à celui de la population française. Cette évolution traduit en grande partie celle des quotas d'infirmiers. Ils sont très majoritairement salariés (83 %), cependant l'exercice libéral ou mixte est en légère progression, il a notamment gagné trois points depuis 2001 pour atteindre 17 % en 2015. Les infirmiers restent une population relativement jeune et féminisée avec 87 % de femmes, et près d'un praticien sur cinq ayant moins de 30 ans (17 %) en 2015, une proportion en hausse depuis 2001 (13 %). Avec des départs en retraite plus tardifs qu'au début des années 2000, la proportion des infirmiers de plus de 50 ans est cependant, elle aussi, en forte hausse (de 23 % à 36 % entre 2001 et 2015). Finalement, l'âge moyen est resté relativement stable au cours de la période (entre 41 et 43 ans environ). La progression des effectifs s'est poursuivie et on dénombre en 2021 764 260 infirmiers.² Mais les conditions de travail se sont dégradées à l'hôpital et près d'une infirmière hospitalière sur deux a quitté l'hôpital ou changé de métier après dix ans de carrière³. Cette publication de la Drees étudie les trajectoires professionnelles des infirmières hospitalières entrées dans la profession entre 1989 et 2019. Ces parcours sont analysés à partir des données administratives du Panel tous actifs produit par l'Institut national de la statistique et des études économiques (Insee). Par ailleurs, les étudiantes en formation d'infirmière - bien que leur nombre progresse depuis 2019 - sont trois fois plus nombreuses à abandonner en première année en 2021 qu'en 2011⁴.

Réalisée dans le cadre du projet TRAILSS : TRAjectoires des Infirmières entre le Libéral et le Salariat, Santé mentale et addictions, cette bibliographie a pour objectif de rassembler de la littérature scientifique sur la profession infirmière en France et dans les pays de l'OCDE sous les angles suivants : santé mentale, addictions, conditions de travail, histoire professionnelle (motifs d'abandon du métier et des études infirmières), impact du covid sur la santé. Les recherches ont été menées sur les bases bibliographiques et les portails suivants : Pubmed, Web of science, Cairn, Google scholar, Ehesp, Irdes, Hal sur une période allant de 2010 à juillet 2023, avec une mise à jour en 2024

La bibliographie ne prétend pas à l'exhaustivité.

¹ Barlet, M., Dupilet, C., Richard, T., et al. (2016). "Portrait des professionnels de santé." Série Etudes Et Recherches - Document De Travail - Drees(134): 123.

² Répertoire ADELI- Drees, données au 1^{er} janvier de l'année 2021.

³ Pora, P. "Près d'une infirmière hospitalière sur deux a quitté l'hôpital ou changé de métier après dix ans de carrière ." Etudes et Résultats (Drees)(1277).

⁴ Simon, M. (2023). "Les étudiantes en formation d'infirmière sont trois fois plus nombreuses à abandonner en première année en 2021 qu'en 2011." Etudes et Résultats (Drees)(1266).

Santé mentale, conditions de travail et histoire professionnelle

ARS Grand Est (2023). Suivi de cohorte des étudiants paramédicaux en Grand Est, Nancy : Ars Grand Est
<https://www.grand-est.ars.sante.fr/media/110770/download?inline>

Suite à l'augmentation du taux d'interruption et les difficultés rencontrées par les étudiants en santé, un suivi de cohorte a été réalisé par un institut d'enquête indépendant pour obtenir des données quantitatives concernant la satisfaction des étudiants infirmiers et masseurs-kinésithérapeutes, ainsi que des élèves aides-soignants, au premier semestre 2023. Cette infographie en présente les résultats.

Boston-Leary, K. et Duarte, M. L. C. (2023). "The mental health of nurses who are women and mothers during the COVID-19 pandemic." Worldviews Evid Based Nurs **44**: e20220006.

OBJECTIVE: To reflect on the mental health of nurses who are women and mothers in the context of the COVID-19 pandemic. METHOD: Theoretical-reflective study based on scientific literature, supported by national and international scientific literature, in addition to a critical analysis by the authors. RESULTS: Reflections on the subject go beyond the impact of motherhood on these women's lives, as it portrays a gender issue and the role of women within society. The stress of working on the frontlines of a pandemic, added to the demands of children and housework, can trigger exhaustion and mental health repercussions. CONCLUSION: Workers must seek individual measures and health managers must enable collective strategies in the work environment of the institutions, proposing public policies that make both employers, workers and their families co-responsible.

Bui, M. V., McInnes, E., Ennis, G., et al. (2023). "Resilience and mental health nursing: An integrative review of updated evidence." Int J Ment Health Nurs **28**(1):71-85

Mental health nursing work is challenging, and workplace stress can have negative impacts on nurses' well-being and practice. Resilience is a dynamic process of positive adaptation and recovery from adversity. The aims of this integrative review were to examine and update understandings and perspectives on resilience in mental health nursing research, and to explore and synthesize the state of empirical knowledge on mental health nurse resilience. This is an update of evidence from a previous review published in 2019. Using integrative review methodology, 15 articles were identified from a systematic search (July 2018-June 2022). Data were extracted, analysed with constant comparison method, synthesized narratively and then compared with the findings from the original review. As an update of evidence, mental health nurse resilience was moderate to high across studies, was positively associated with psychological well-being, post-traumatic growth, compassion satisfaction and negatively associated with burnout, mental distress and emotional labour. Lack of support and resources from organizations could negatively impact nurses' ability to maintain resilience and manage workplace challenges through internal self-regulatory processes. A resilience programme improved mental health nurses' awareness of personal resilience levels, self-confidence, capacity to develop coping skills and professional relationships. Some studies continue to lack contemporary conceptualizations of resilience, and methodological quality varied from high to low. Further qualitative and interventional research is needed to investigate the role of resilience in mental health nursing practice, personal well-being, workforce sustainability and the ongoing impacts of the COVID-19 pandemic.

Chen, H. J. et Liao, L. L. (2023). "Burnout and Mental Health and Well-Being of School Nurses After the First Wave of the COVID-19 Pandemic: A National Cross-Sectional Survey." J Sch Nurs **39**(2): 125-132.

The aim of this study was to examine the associations between job stressors, COVID-19-related concerns, burnout, and mental health and well-being among school nurses, and whether any of these associations are mediated by burnout. Based on stratified proportional sampling, data collection was conducted by an online questionnaire distributed to 600 school nurses in Taiwan. A total of 256 participants aged between 27 and 62 years (mean = 47.08; standard deviation = 7.28) returned

questionnaires. Results showed that burnout was the main mediating variable that fully mediated the relationship between COVID-19-related concerns and mental health and well-being. The effects of job stressors on mental health and well-being included direct negative effects ($\beta = -.29$) and indirect negative effects ($\beta = -.67$) through mediating factors. School health managers should be more aware of burnout and mental health and well-being among school nurses under the impact of COVID-19.

Cheng, H., Liu, G., Yang, J., et al. (2023). "Shift work disorder, mental health and burnout among nurses: A cross-sectional study." *Nurs Open* **10**(4): 2611-2620.

AIM: The aim of the study was to examine the relationships among nurses' shift work disorder, mental health and burnout to inform efforts to alleviate shift work disorder. DESIGN: This cross-sectional study was conducted in China using a web-based platform for questionnaire. METHODS: The study was comprised of a convenience sample of 1,268 Registered Nurses from 21 public hospitals in mainland China from June 2019-July 2019. Participants completed a web-based survey designed to collect demographic and other self-reported data. An independent sample t test and Pearson correlation were performed to analyse the relationship between shift work disorder, mental health and burnout. RESULTS: The vast majority (98.2%) of the participants were women between the ages of 20-59 years. The participants exhibited a higher incidence of mental health problems (58.1%) and burnout (65.5%) and those with shift work disorder exhibited a higher risk of mental health problems and burnout than those who did not have shift work disorder. Our research demonstrated that shift work disorder, combined with other variables, accounted for 40.5% of the variance in mental health ($R(2) = .405$, adjusted $R(2) = .401$, $F = 107.214$, $p < .001$) and 36.5% in burnout ($R(2) = .365$, adjusted $R(2) = .361$, $F = 90.323$, $p < .001$). Moreover, burnout negatively regulated the relationship between shift work disorder and mental health. CONCLUSION: High-risk nurses with shift work disorder were at a much higher risk of mental health problems and burnout.

Coelho, J. et Taillard, J. (2023). "Emotional Exhaustion, a Proxy for Burnout, Is Associated with Sleep Health in French Healthcare Workers without Anxiety or Depressive Symptoms: A Cross-Sectional Study." *Journal of Clinical Medicine* **12**(5).

Burnout is frequent among healthcare workers, and sleep problems are suspected risk factors. The sleep health framework provides a new approach to the promotion of sleep as a health benefit. The aim of this study was to assess good sleep health in a large sample of healthcare workers and to investigate its relationship with the absence of burnout among healthcare workers while considering anxiety and depressive symptoms. A cross-sectional Internet-based survey of French healthcare workers was conducted in summer 2020, at the end of the first COVID-19 lockdown in France (March to May 2020). Sleep health was assessed using the RU-SATED v2.0 scale (Regularity, Satisfaction, Alertness, Timing, Efficiency, Duration). Emotional exhaustion was used as a proxy for overall burnout. Of 1069 participating French healthcare workers, 474 (44.3%) reported good sleep health (RU-SATED > 8) and 143 (13.4%) reported emotional exhaustion. Males and nurses had a lower likelihood of emotional exhaustion than females and physicians, respectively. Good sleep health was associated with a 2.5-fold lower likelihood of emotional exhaustion and associations persisted among healthcare workers without significant anxiety and depressive symptoms. Longitudinal studies are needed to explore the preventive role of sleep health promotion in terms of the reduction in burnout risk.

Compton, R. M., Murdoch, N. H., Press, M. M., et al. (2023). "Capacity of nurses working in long-term care: A systematic review qualitative synthesis." *J Clin Nurs* **32**(9-10): 1642-1661.

Background The United Nations calculates there were 703 million adults 65 years and older globally as of 2019 with this number projected to double by 2050. A significant number of older adults live with comorbid health conditions, making the role of a nurse in long-term care (LTC) complex. Our objective was to identify the challenges, facilitators, workload, professional development and clinical environment issues that influence nurses and nursing students to seek work and continue to work in LTC settings. Methods Eligibility criteria included being a nurse in a LTC setting and research with a substantial qualitative component. Multiple databases (including Medline and CINAHL) were searched

between 2013 and 2019 along with grey literature. Covidence was used to organise a team of 10 into a paired review of titles and abstracts to the final full text screening, extraction and appraisal with the CASP Qualitative Studies Checklist. Analysis involved a thematic synthesis approach. The Enhancing Transparency in Reporting the Synthesis of Qualitative Research (ENTREQ) checklist informed the writing of the review. Results The search resulted in 18 articles and dissertations. Areas investigated included recruitment, resilience, employment and retention, how nurses perceived their professional work, rewards and difficulties, supervision, student preceptorship and career aspiration, nurses' perceptions of occupational status, along with leadership, education and development needs, and intentions to manage resident deteriorating health. The five themes were (1) perspectives of nursing influenced by the organisation, (2) pride in, and capacity to build relationships, (3) stretching beyond the technical skills, (4) autonomy, and (5) taking on the challenge of societal perceptions. Discussion This review revealed what is required to recruit nursing students to careers in LTC and retain nurses. To be explored is how staff can work to their full scope of practice and the resultant impact on resident care, including how to maximise a meaningful life for residents and their families. Registration National Institute for Health Research UK (Prospero ID: CRD42019125214).

Dejours, C., Svandra, P., Perraut Soliveres, A., et al. (2023). "Infirmières : une variable d'ajustement ?" Pratiques : Les Cahiers De la Médecine Utopique: 2-78.

Ballottées depuis toujours entre desiderata des médecins, volonté d'économies, pénuries organisées, décret d'actes qui changent en fonction des nécessités, les infirmières restent le pivot essentiel de l'organisation des soins à l'hôpital comme en ville. La subjectivité compte beaucoup dans l'expérience de la maladie et c'est précisément dans cet espace que se situe également le rôle propre des infirmières. Espace négligé par la médecine et que les managers sont en train de faire disparaître. Ce n'est pas la pseudo-intelligence artificielle qui va prendre soin de la population, pas plus que la dématérialisation des soins ou les consultations à distance. Comment sauver ce qu'il reste d'humanité dans la profession infirmière avant qu'elle ne disparaisse complètement ?

Douguet, F. (2023). "Absentéisme en stage infirmier." Revue Hospitalière De France: 40-42.

Une enquête sociologique, réalisée auprès de formateurs en instituts de formation en soins infirmiers, explore les raisons des absences des étudiants en soins infirmiers lors de leurs stages. Ses résultats montrent que l'absentéisme des apprentis soignants reflète, en grande partie, les difficultés vécues par les infirmiers en exercice. Des actions sont à mettre en œuvre pour limiter ce phénomène. (R.A.)

El Haïk-Wagner, N. (2023). "La vision des élèves sur leur entrée dans le métier." Soins cadres: 47-53.

La profession d'infirmier anesthésiste diplômé d'État (Iade) constitue l'un des segments les plus masculinisés et les mieux rémunérés du groupe infirmier. Rares sont les études interrogeant leur identité professionnelle. Cette étude, conduite auprès de quatre-vingts élèves Iade en 2^e année de formation à l'Assistance publique-Hôpitaux de Paris, revient sur les trajectoires professionnelles antérieures des élèves, sur leurs motivations quant au choix de cette profession et sur leurs perceptions de l'entrée dans le métier.

Fond, G., Lucas, G. et Boyer, L. (2023). "Health-promoting work schedules among nurses and nurse assistants in France: results from nationwide AMADEUS survey." BMC Nurs **22**(1): 255.
<https://www.ncbi.nlm.nih.gov/pubmed/37537611>

BACKGROUND: The study aimed to investigate the relationship between different work schedules and self-reported working conditions and health risk behaviours among nurses and nurse assistants (NNA) in France. It hypothesized that work schedules, particularly long shifts, could impact work-life balance, workload, stress levels, burnout, and smoking habits. NNA had the option to work either with a 7-hour schedule, 5 days per week, or with long work schedules consisting of ten to twelve-hour shifts, three days per week. These schedules could potentially influence various aspects of their professional lives. METHODS: The survey followed the guidelines of the Strengthening the Reporting of Observational

Studies in Epidemiology (STROBE) Statement and was administered to NNA working in public and private national healthcare facilities in France. The researchers used the Job Content Questionnaire to assess the work environment and the French version of the 22-item Maslach Burnout Inventory (MBI) scale to measure burnout. RESULTS: A total of 3,133 NNA participated in the study, including 2,369 nurses (75.6%) and 764 nurse assistants (24.4%). Among them, 1,811 individuals (57.8%) followed a 7-hour work schedule, while 1,322 individuals (42.2%) had a long work schedule. Multivariate analyses revealed that NNA working with long schedules reported higher psychological demands, more frequent burnout, a higher number of daily smoked cigarettes, and greater coffee consumption. These findings were independent of other factors such as sector of employment, type of healthcare facility, job status, work schedules, night shifts, department specialty, age, and family responsibilities. CONCLUSIONS: While some NNA may choose long schedules to have more days off, those working with these schedules experience greater work-related burdens and engage in worse health risk behaviours as a coping mechanism. It emphasizes the importance of considering health-promoting work schedules to address the high psychological demands and burnout experienced by NNA with long schedules. Implementing changes in work schedules could potentially improve the overall well-being and job satisfaction of these healthcare professionals.

Ge, M. W., Hu, F. H., Jia, Y. J., et al. (2023). "Global prevalence of nursing burnout syndrome and temporal trends for the last 10 years: A meta-analysis of 94 studies covering over 30 countries." *J Clin Nurs*. **32**(17-18):5836-5854

Aims and Objectives to determine the global prevalence of nursing burnout syndrome and time trends for the last 10 years. Background The prevalence of burnout syndrome varied greatly in different regions in the last 10 years, so the average prevalence and time trends of nursing burnout syndrome for the last 10 years were not completely clear. Design meta-analysis conducted in the PRISMA guidelines. Methods CINAHL, Web of Science, and PubMed were searched for trials on the prevalence of nursing burnout syndrome from 2012 to 2022 systematically. Hoy's quality assessment tool was used to evaluate the risk of bias. The global prevalence of nursing burnout syndrome was estimated, and subgroup analysis was used to explore what caused heterogeneity. Time trends for the last 10 years were evaluated by meta-regression using Stata 11.0. Results Ninety-four studies reporting the prevalence of nursing burnout were included. The global prevalence of nursing burnout was 30.0% [95% CI: 26.0%-34.0%]. Subgroup analysis indicated that the specialty ($p < .001$) and the region ($p < .001$) and the year ($p < .001$) were sources of the high heterogeneity. Meta-regression indicated that it tended to increase gradually for the last 10 years ($t = 3.71$, $p = .006$). The trends increased in Europe ($t = 4.23$, $p = .006$), Africa ($t = 3.75$, $p = .006$) and obstetrics ($t = 3.66$, $p = .015$). However, no statistical significance was found in ICU ($t = -.14$, $p = .893$), oncology ($t = -0.44$, $p = .691$) and emergency department ($t = -0.30$, $p = .783$). Conclusions A significant number of nurses were found to have moderate-high levels of burnout syndrome for the last 10 years. The meta-analysis also indicated an increased trend over time. Therefore, more attention to the prevalence of nursing burnout syndrome is urgently required. Relevance to Clinical Practice High prevalence of nursing burnout may attract more attention from the public. This analysis may serve as an impetus for relevant policy to change nurses' working conditions and reduce the occurrence of burnout.

Gilioli, C. (2023). "Infirmier, malaise dans le genre ?" *Gestions Hospitalières*(626): 311-313.

n 2017, dans un article consacré à l'égalité des droits, Marie-Gabrielle Vaissière-Bonnet mettait en exergue que celle entre hommes et femmes n'est que théorique à l'hôpital(1). La réalité, par l'entremise de ce qu'il est convenu d'appeler l'«escalator de verre?» (en référence au plafond de verre)(2), montre une forte inégalité, notamment dans l'évolution de carrière des infirmiers/ères dans le service public hospitalier. En raison même de ses principes et de ses valeurs (égalité, neutralité...), cet espace ne devrait pourtant connaître – entre autres – aucune discrimination par le sexe. Au-delà du constat in fine que M.-G. Vaissière-Bonnet dénonçait en le dévoilant, cette situation est aussi insidieuse qu'inacceptable. Il est possible toutefois qu'elle relève d'un ressort plus inattendu qu'un simple héritage d'un patriarcat justement combattu, mais presque toujours passé sous silence.

Groves, S., Lascelles, K. et Hawton, K. (2023). "Suicide, self-harm, and suicide ideation in nurses and midwives: A systematic review of prevalence, contributory factors, and interventions." *J Affect Disord* **331**: 393-404.

BACKGROUND: Nurses have been identified as an occupational group at increased risk of suicide. This systematic review examines the prevalence of, and factors influencing, suicide and related behaviours among nurses and midwives (PROSPERO pre-registration CRD42021270297). **METHODS:** MEDLINE, PsycINFO, and CINAHL were searched. Articles published from 1996 onwards exploring suicidal thoughts and behaviours among nurses and midwives were included. Quality of included studies was assessed. Articles were subjected to narrative synthesis informed by suicide data examined, study design, and quality. PRISMA guidelines were followed. **RESULTS:** A total of 100 studies were eligible for inclusion in the review. Articles examining suicide exclusively among midwives were absent from the literature. Several studies confirmed that nursing professionals, especially female, are at increased risk of suicide, particularly by self-poisoning. Factors contributing to risk include psychiatric disorders, alcohol and substance misuse, physical health problems, and occupational and interpersonal difficulties. In studies of non-fatal suicidal behaviours, including during the COVID-19 pandemic, psychiatric, psychological, physical and occupational factors were contributory. There has been little investigation of interventions for prevention of suicide in nurses. **LIMITATIONS:** Only articles published in English language were reviewed. **CONCLUSIONS:** The findings highlight the risk of suicide in nurses. They also show a combination of factors contribute to suicide and non-fatal suicidal behaviour in nurses, with psychiatric, psychological, physical health, occupational and substance misuse (especially alcohol) problems being particularly important. The limited evidence regarding prevention measures indicates a major need to develop primary and secondary interventions for this at-risk occupational group, for example, education regarding enhancing wellbeing and safe alcohol use, alongside accessible psychological support.

Kong, L. N., Yao, Y., Chen, S. Z., et al. (2023). "Prevalence and associated factors of burnout among nursing students: A systematic review and meta-analysis." *Nurse Educ Today* **121**: 105706.

OBJECTIVES: To systematically estimate the global prevalence of burnout among nursing students, and examine the associated factors of burnout in this population. **DESIGN:** A systematic review and meta-analysis. **REVIEW METHODS AND DATA SOURCES:** PubMed, Embase, Web of Science, and CINAHL were searched from inception to June 30th, 2022. Two researchers independently screened studies, extracted data and assessed the quality of included studies. The random-effects model was used to estimate the global prevalence of burnout among nursing students. Subgroup analysis, meta-regression analysis, publication bias, and sensitivity analysis were also conducted. **RESULTS:** A total of 21 studies were included, involving 10,861 nursing students. In the random-effects model, the pooled prevalence of burnout was 23.0 % (95 % CI = 15.6-30.5 %) in nursing students. The pooled prevalence of emotional exhaustion, depersonalization, and reduced personal accomplishment was 47.1 %, 32.2 %, and 43.5 %, respectively. Main associated factors of burnout included demographic (e.g., age and grade), educational (e.g., workload, academic satisfaction, and incivility experience), physical (e.g., sleep quality and physical activity), and psychological (e.g., self-efficacy and personality traits) factors. **CONCLUSIONS:** Burnout is common in nursing students, with demographic, educational, physical, and psychological factors affecting their burnout. Early screening of burnout and interventions to prevent and reduce burnout should be considered for nursing students.

Lee, B. E. C., Ling, M., Boyd, L., et al. (2023). "The prevalence of probable mental health disorders among hospital healthcare workers during COVID-19: A systematic review and meta-analysis." *J Affect Disord* **330**: 329-345.

OBJECTIVES: The mental health impacts of the COVID-19 pandemic continue to be documented worldwide with systematic reviews playing a pivotal role. Here we present updated findings from our systematic review and meta-analysis on the mental health impacts among hospital healthcare workers during COVID-19. **METHODS:** We searched MEDLINE, CINAHL, PsycINFO, Embase and Web Of Science Core Collection between 1st January 2000 to 17th February 2022 for studies using validated methods and reporting on the prevalence of diagnosed or probable mental health disorders in hospital

healthcare workers during the COVID-19 pandemic. A meta-analysis of proportions and odds ratio was performed using a random effects model. Heterogeneity was investigated using test of subgroup differences and 95 % prediction intervals. RESULTS: The meta-analysis included 401 studies, representing 458,754 participants across 58 countries. Pooled prevalence of depression was 28.5 % (95 % CI: 26.3-30.7), anxiety was 28.7 % (95 % CI: 26.5-31.0), PTSD was 25.5 % (95 % CI: 22.5-28.5), alcohol and substance use disorder was 25.3 % (95 % CI: 13.3-39.6) and insomnia was 24.4 % (95 % CI: 19.4-29.9). Prevalence rates were stratified by physicians, nurses, allied health, support staff and healthcare students, which varied considerably. There were significantly higher odds of probable mental health disorders in women, those working in high-risk units and those providing direct care. LIMITATIONS: Majority of studies used self-report measures which reflected probable mental health disorders rather than actual diagnosis. CONCLUSIONS: These updated findings have enhanced our understanding of at-risk groups working in hospitals. Targeted support and research towards these differences in mental health risks are recommended to mitigate any long-term consequences.

Morel, M. (2023). "Jeunes professionnels infirmiers : Attentes et projections." Revue Hospitalière de France: 35-37.

Le métier d'infirmier intéresse, le constat est unanime. Pourtant, les problématiques de recrutement subsistent et les services se vident. Une question se pose : quelles raisons poussent les étudiants à ne plus se retrouver dans le métier qu'ils ont pratiqué tout au long de leur formation ? (R.A.)

OCDE (2023). Au-delà des applaudissements ? Améliorer les conditions de travail dans le secteur des soins de longue durée. Paris OCDE

<https://www.oecd-ilibrary.org/docserver/160ef74a-fr.pdf>

Ce rapport présente une analyse internationale approfondie de la situation des travailleurs du secteur des soins de longue durée au regard des différentes dimensions de la qualité des emplois. Dans les premières phases de la pandémie de Covid-19, les applaudissements adressés aux soignants ont été l'expression manifeste de la reconnaissance de leur travail acharné et des risques auxquels leurs fonctions les exposaient. Cependant, alors que les applaudissements se faisaient plus rares après le pic de la crise, la question de l'amélioration durable des conditions de travail des personnels du secteur des soins de longue durée est revenue sur le devant de la scène. Au cours des prochaines décennies, la demande de travail en provenance des entreprises de ce secteur va augmenter sensiblement. Plusieurs pays sont déjà confrontés à des pénuries à mesure que la génération du baby-boom entre dans le troisième âge.

Pora, P. (2023) "Près d'une infirmière hospitalière sur deux a quitté l'hôpital ou changé de métier après dix ans de carrière ." Etudes et Résultats (Drees)(1277)

<https://drees.solidarites-sante.gouv.fr/publications-communique-de-presse/etudes-et-resultats/pres-dune-infirmiere-hospitaliere-sur-deux>

Cette publication étudie les trajectoires professionnelles des infirmières hospitalières entrées dans la profession entre 1989 et 2019. Ces parcours sont analysés à partir des données administratives du Panel tous actifs produit par l'Institut national de la statistique et des études économiques (Insee). Cette étude s'attache à décrire la part des infirmières hospitalières qui occupent toujours ce métier au fur et à mesure de leur carrière et si elles exercent cet emploi à l'hôpital, en tant que salariée d'un autre secteur ou en libéral. L'effet de la maternité sur le volume de travail salarié et sur les sorties de l'emploi salarié est aussi décrit.

Pressley, C. et Garside, J. (2023). "Safeguarding the retention of nurses: A systematic review on determinants of nurse's intentions to stay." Nurs Open **10**(5): 2842-2858.

AIM: To explore factors that influence registered nurses' intention to stay working in the healthcare sector. DESIGN: A systematic review and narrative synthesis. METHODS: CINAHL, Medline and Cochrane library databases were searched from Jan 2010 to Jan 2022 inclusive and research selected

using a structured criterion, quality appraisal and data extraction and synthesis were guided by Campbell's Synthesis Without Meta-analysis. RESULTS: Thirty-four studies identified that nurses stay if they have job satisfaction and/or if they are committed to their organizations. The factors permeating these constructs weigh differently through generations and while not an infallible explanation, demonstrate stark differences in workplace needs by age, which influence the intention to stay, job satisfaction, organizational commitment and ultimately nurse turnover. PUBLIC CONTRIBUTION: Environmental, relational and individual factors have bearing on improving nurse satisfaction and commitment. Understanding why nurses stay through a generational behavioural and career stage lens can bolster safeguarding nurse retention.

Simon, M. (2023). "Les étudiantes en formation d'infirmière sont trois fois plus nombreuses à abandonner en première année en 2021 qu'en 2011." Etudes et Résultats (Drees) (1266)

Depuis 2019, le nombre d'étudiantes en première année de formation d'infirmière progresse fortement pour atteindre près de 35 500 en 2021, après être resté globalement stable dans les années 2010, autour de 31 000. Le nombre de diplômées chaque année a cependant baissé de 7 % entre le pic des années 2010 et 2021 (de 26 500 à 24 500), les infirmières diplômées en 2021 n'étant pas encore concernées par la hausse des effectifs des promotions. Le nombre de diplômées en 2021 représente 81 % du nombre d'étudiantes entrées en formation trois ans plus tôt. En 2021, 10 % des étudiantes ont abandonné leurs études en première année de formation, elles étaient trois fois moins en 2011 (3 %). Sur l'ensemble de la scolarité de la promotion entrée en 2018, 14 % des étudiantes ont abandonné leurs études, soit 3 points de plus que pour la promotion 2011. Ces abandons sont plus fréquents en Normandie et dans les Pays de la Loire, ainsi que parmi les hommes. Une étudiante sur dix en première année de formation d'aide-soignante ou de manipulatrice d'électroradiologie médicale a abandonné ses études en 2021. Pour la plupart des formations sanitaires, le taux d'abandon en première année augmente sensiblement par rapport au début des années 2010. Parmi les formations d'une durée de trois ou quatre ans, le taux d'abandon sur toute la scolarité a doublé au cours des années 2010 pour les manipulatrices d'électroradiologie médicale et les pédicures-podologues. (R.A.)

Soerensen, J., Nielsen, D. S. et Pihl, G. T. (2023). "It's a hard process - Nursing students' lived experiences leading to dropping out of their education; a qualitative study." Nurse Educ Today **122**: 105724.

BACKGROUND: Dropout from nursing education is a serious problem worldwide. Student nurse attrition has a profound effect not only on the nursing profession and patient care, but also on the students themselves. Dropout is recognized as a complex phenomenon that has multiple causes. A more detailed and nuanced understanding of the complexity behind dropout is needed if we are to retain more nursing students. AIM: To explore the students' experiences and considerations before dropping out and their reflections after dropping out to gain a deeper understanding of the factors that prompted them to leave their nursing education. DESIGN/METHOD: A qualitative explorative design inspired by Gadamer's philosophical hermeneutics was used to explore the students' lived experiences and considerations concerning dropping out. Qualitative telephone interviews were conducted on 15 nursing students. RESULTS: The analysis revealed three main themes that disclosed and elucidated the nursing students' reasons for dropping out: (i) Resources to make a difference and help others; (ii) Clinical practice was more demanding than expected; (iii) The learning environment was important - the social environment was essential. CONCLUSION: The students encountered a lack of support to deal with the difficult emotions that arose when witnessing serious illness and death. They expressed feeling overwhelmed by their vulnerability and called for support to develop resilience. The social environment and a sense of belonging to the nursing profession were cited by students as being essential to this support.

Teng, M., Yuan, Z. Q., He, H., et al. (2023). "Levels and influencing factors of mental workload among intensive care unit nurses: A systematic review and meta-analysis." Int J Nurs Pract. :e13167

Aim The purpose of this systematic review was to determine the levels and influencing factors of mental workload in intensive care unit nurses. Background Intensive care unit nurses have a high

mental workload level. To our knowledge, no meta-analytic research investigating the levels of mental workload in intensive care unit nurses and related factors has yet been performed. **Design** This article is a systematic review and meta-analysis. **Methods** Eleven electronic databases were searched from the database setup dates until 31 December 2022. The research team independently conducted study selection, quality assessments, data extractions and analysis of all included studies. The PRISMA guideline was used to guide reportage of the systematic review and meta-analysis. **Results** Seventeen studies were included. In these studies, the pooled mean score of mental workload was 68.07 (95%CI:64.39-71.75). Furthermore, subgroup analyses indicated that intensive care unit nurses' mental workload differed significantly by countries, sample size and publication year. The mental workload influential factors considered were demographic, work-related and psychological factors. **Conclusion** Hospital administrators should develop interventions to reduce mental workload to enhance the mental health of intensive care unit nurses and nursing care quality. Hospital managers should pay attention to the mental health of nurses and guide them to correctly relieve occupational stress and reduce mental workload.

Velando-Soriano, A., Suleiman-Martos, N., Pradas-Hernández, L., et al. (2023). "Factors related to the appearance and development of burnout in nursing students: a systematic review and meta-analysis." *Front Public Health* **11**: 1142576.

INTRODUCTION: Burnout may be suffered not only by experienced nurses, but also by those in training. The university environment can be highly stressful for student nurses, who are exposed to various stress-producing situations. **AIM:** The aim of this study is to identify and analyse the main risk factors for burnout among nursing students. **METHODS:** A systematic review with meta-analysis was performed. The search equation used was "Burnout AND Nursing students". Quantitative primary studies on burnout in nursing students, and related risk factors published in English or Spanish and with no restriction by year of publication were included. **RESULTS:** A sample of $n = 33$ studies were included. Three variables are identified can influence burnout in nursing students: academic, interpersonal, environmental and/or social factors. The meta-analyses, with the higher sample of $n = 418$ nursing students, show that some personality factors, empathy, and resilience are correlated with emotional exhaustion, depersonalization and personal accomplishment. **CONCLUSION:** The personality factors that can influence the development of burnout in nursing students, such as resilience and empathy, among others, must be taken into account when preventing the appearance and treating burnout. Professors should teach nursing students to prevent and recognize the most frequent symptoms of burnout syndrome.

Vidotti, V., Ribeiro, R. P., Galdino, M. J. Q., et al. (2018). "Burnout Syndrome and shift work among the nursing staff." *Revista latino-americana de enfermagem* **26**.

Vitale, E., Lupo, R., Artioli, G., et al. (2023). "How shift work influences anxiety, depression, stress and insomnia conditions in Italian nurses: an exploratory study." *Acta Biomed* **94**(2): e2023102.

BACKGROUND AND AIM OF THE WORK: Evidence suggested that the nursing profession could be considered as a very complex profession also for nurses themselves. To investigate how shift work influence nurses' health also considering anxiety, depression, stress and insomnia conditions. **METHODS:** An on-line cohort observational study was conducted during May 2022 to 408 nurses. **RESULTS:** 408 nurses were on-line recruited. Most of the nurses recruited worked also during the night shift (73.3%) and were very young ($p < 0.001$), as aged less than 30 years (29.2%) and also aged between 31-40 years (29), too. Significant difference was reported in smoking habit, as nurses who worked also during the night reported higher smoking habit then the others ($p = 0.020$). None further significant differences according to sex, age, work experience, nursing education, nursing activity, BMI and shift work was found. Finally, none differences were assessed between anxiety, depression, stress and insomnia conditions according to shift work typologies. **CONCLUSIONS:** The present study discussed research results already highlighted in the current literature; however, it collected further information and assessed additional differences, so that a more complete picture of the nursing profession could be defined.

Amiard, V., Telliez, F., Pamart, F., et al. (2022). "Health, Occupational Stress, and Psychosocial Risk Factors in Night Shift Psychiatric Nurses: The Influence of an Unscheduled Night-Time Nap." *Int J Environ Res Public Health* **20**(1).

BACKGROUND: Occupational stress and shift work (including night shift work) are associated with physical and psychological health consequences in healthcare providers in general and those working in psychiatric establishments in particular. The aim of this study was to assess the impact of occupational risk factors and unscheduled night-time naps on self-reported health disorders among nurses working in a French psychiatric hospital. **METHODS:** We performed a 12-month observational field study of experienced nurses working at Philippe Pinel Psychiatric Hospital (Amiens, France) between September 2018 and September 2019. A comparative descriptive study of two groups of nurses who filled out a questionnaire on health and occupational stress was performed: nurses working permanently on the night shift (the night shift group, who took unscheduled naps), and nurses rotating weekly between morning and afternoon shifts (the day shift group). **RESULTS:** The night and day shift groups comprised 53 and 30 nurses, respectively. There were no intergroup differences in health disorders, sleep quality, occupational stress, and risk factor perception. Correlation analyses showed that in the day shift group, a low level of support from supervisors was associated with elevated levels of distress, anxiety, and gastrointestinal disorders. In the night shift group, a greater overall work load was associated with elevated levels of anxiety and distress. These findings indicated that the nurses on the night shift had adapted well to their working conditions. **CONCLUSIONS:** An organizational strategy including an unscheduled night-time nap might improve health among night shift nurses.

Baret, C., Recotillet, I. et Kornig, C. (2022). "Quelles caractéristiques des conditions de travail ont un impact sur la reconnaissance au travail ? Le cas d'un centre hospitalier universitaire français." *Journal de gestion et d'économie de la santé* **5-6**(5): 398-417.

<https://www.cairn.info/revue-journal-de-gestion-et-d-economie-de-la-sante-2022-5-page-398.htm>

En France, les personnels hospitaliers dénoncent depuis plusieurs années une dégradation de leurs conditions de travail dues aux restrictions budgétaires, aux sous effectifs et à l'accroissement des tâches administratives. Parallèlement, de nombreuses professions de santé réclament une meilleure reconnaissance de leur qualification et de la pénibilité de leur travail. Cela n'est pas nouveau, puisque ce sont en effet les infirmières qui, les premières, ont revendiqué une meilleure reconnaissance au travail pour professionnaliser leur métier, et ce, dès 1988 [1]. Peut-on mettre en évidence des relations entre les conditions de travail et la reconnaissance ? En sciences de gestion, les travaux sur la reconnaissance ont principalement porté sur l'identification des pratiques de reconnaissance, ou de non-reconnaissance, et sur ses effets sur le comportement des salariés dans l'organisation. Peu de travaux traitent des facteurs qui ont une influence sur la reconnaissance. L'impact des transformations des conditions de travail est évoqué mais ne s'appuie pas sur des résultats empiriques. Dans cette recherche, nous retenons l'approche multidimensionnelle de la reconnaissance de Brun et Dugas [16] pour tester cinq hypothèses sur les relations entre certaines caractéristiques des conditions de travail et certaines dimensions de la reconnaissance sur la base de l'exploitation de 26 entretiens semi-directifs et d'un questionnaire administré dans un centre hospitalier universitaire français en 2018. Les conditions de travail ont une influence quasi similaire sur toutes les dimensions de la reconnaissance. L'autonomie dans le travail, le soutien de la hiérarchie et les moyens disponibles pour réaliser son travail sont les caractéristiques des conditions de travail qui ont la plus forte influence sur la reconnaissance. Sur un plan plus descriptif, les résultats montrent que les médecins, les personnels soignants et les personnels médico-techniques sont ceux qui expriment le plus grand déficit de reconnaissance. Parmi les 4 dimensions de la reconnaissance, c'est principalement celle de l'investissement au travail qui fait défaut.

Canzan, F., Saiani, L., Mezzalana, E., et al. (2022). "Why do nursing students leave bachelor program? Findings from a qualitative descriptive study." *BMC Nurs* **21**(1): 71.

BACKGROUND: Over the past few years, the phenomenon of "nursing student attrition" has been unevenly studied. Investigators often focused on independent predictors as age, family obligations, final grade of high school, demanding physical and mental workload and others. Specifically, just a few studies applied qualitative methods to better comprehend the very needs of first year students enrolled in a bachelor's degree in nursing sciences (BSN), to sustain their learning process and define effective strategies to reduce student drop-out. **METHODS:** We conducted a qualitative descriptive study. Thirty-one nursing students at Verona University were interviewed using a semi-structured guide. Data analysis was performed according to a descriptive approach by Sandelowski & Barroso (2000). **RESULTS:** A total number of 31 students were interviewed. The most recurrent themes regarding the reasons behind BSN drop-out were: understanding that they were not suited to be nurses, perception of missing/lack of psychological, physical and practical resources needed to successfully cope with both nursing school and the nursing profession, inconsistencies between the image of the profession and the reality of the job, feelings of disappointment for the experiences of internship, perceived lack of support from the clinical teacher while going through difficult experiences. **CONCLUSIONS:** We can consider a part of these drop-out decisions normal, even physiological when students come to realise that they are not suited for the nursing profession. However, it's important to guide nursing students with adequate counselling in order to give them the essential tools to cope with the training and the future as health professionals.

Ciydem, E. et Bilgin, H. (2022). "The moderating role of resilience in the relationship between peer pressure and risky behaviors among nursing students." *Perspective Psychiatric Care* **58**(1): 355-363.

PURPOSE: To examine the moderating role of resilience in the relationship between peer pressure and risky behaviors among nursing students. **DESIGN AND METHODS:** A cross-sectional correlational study carried out with 512 students. **FINDINGS:** The mean age was 20.90 ± 1.66 . Of the students, 82.4% were females 99.0% were single, 71.5% had moderate socioeconomic status. While peer pressure directly made an effect on whole subdimensions for risky behaviors ($p < 0.001$), resilience had an effect on antisocial behavior, dropout, eating habits, and suicidal tendency ($p < 0.001$). Moderation was supported as the relationship between peer pressure and substance use varied by resilience level ($p < 0.001$). **PRACTICAL IMPLICATIONS:** Students with high levels of resilience are less prone to exhibit some risky behaviors based on peer pressure. Resilience-building strategies should be incorporated into the curriculum.

Cuccia, A. F. (2022). "Trends in mental health indicators among nurses participating in healthy nurse, healthy nation from 2017 to 2021." *Int J Ment Health Nurs* **19**(5): 352-358.

BACKGROUND: American healthcare workers face unprecedented stress and trauma in the workplace during COVID-19, putting nurses at increased risk for poor mental health. Examining trends of mental health from before and during COVID-19 can illuminate the toll of the pandemic on nurses well-being. **METHODS:** Nurses enrolled in Healthy Nurse, Healthy Nation receive a prompt to take an annual survey ($n = 24,289$). Mental health was assessed by active diagnoses of anxiety and depressive disorder, and feeling sad, down or depressed for two or more weeks in the past year. Logistic regression models were used to calculate predictive probabilities of health outcomes in year 4 (May 1, 2020 - April 30, 2021) compared to years 1-3 (each from May 1 to April 30), controlling for age, sex, race/ethnicity, and nurse type. Models were also stratified by work setting and nurse type. **RESULTS:** In year 4, nurses had a 19.8% probability of anxiety disorder, significantly higher than year 3 (16.3%, $p < .001$), year 2 (13.7%, $p < .001$), and year 1 (14.0%, $p < .001$). Similarly, nurses had a 16.7% probability of depression disorder in year 4, significantly higher than year 2 (12.9%, $p < .001$) and year 1 (13.9%, $p < .01$). Year 4 nurses had a 34.4% probability of feeling sad, down or depressed for two weeks, significantly higher than previous years (year 1 = 26.8%, year 2 = 25.9%, year 3 = 29.7%, $p < .001$). Trends in probabilities of mental health indicators were similar among each nurse type and work setting. Nurses in medical/surgical work settings and those with licensed practical nurse and licensed vocational nurse titles consistently had the highest probability of poor mental health. **LINKING ACTION TO EVIDENCE:** In 2020-2021, nurses faced challenges unlike any experienced in previous years.

Unsurprisingly, nurses reported increased instances of poor mental health indicators. Positive disruptive strategies are needed to systemically change organizational culture and policy to prioritize and support nurses' well-being.

Dahan, M. et Wiiktkar, F. (2022). La qualité de vie des étudiants en santé (QVES). Paris Igas
<https://www.igas.gouv.fr/La-qualite-de-vie-des-etudiants-en-sante-QVES.html>

Ce rapport conjoint de l'Inspection générale des affaires sociales (IGAS) et l'Inspection générale de l'éducation, du sport et de la recherche (IGESR) sur la qualité de vie des étudiants en santé (QVES), identifie des initiatives nationales, régionales et locales contribuant à améliorer la qualité de vie des étudiants des différentes filières médicales et paramédicales.

Durigneux, C., Debize, M., Perreto, S., et al. (2022). "Management des équipes de nuit, un défi pour l'hôpital ?" *Revue hospitalière De France*:16-18.

L'attractivité des postes des soignants paramédicaux et le travail de nuit représentent un enjeu managérial fort. Postes vacants à combler, fidélisation et construction de la permanence des soins : autant de sujets sur lesquels travaillent les cadres de santé, managers en santé de proximité, de nuit et de jour. Cet article présente quelques pistes de réflexion. (R.A.)

Fan, S. (2022). "Rethinking "zero tolerance": A moderated mediation model of mental resilience and coping strategies in workplace violence and nurses' mental health." *Int Nurs Rev* **54**(4): 501-512.

AIMS: This study aimed to investigate whether the impact of workplace violence (WPV) on nurses' mental health varies with mental resilience and coping strategies. BACKGROUND: Workplace violence is a serious threat to nurses' mental health, and its impact on nurses' mental health is influenced by many factors. METHOD: A cross-sectional study involving 349 participants was conducted over 12 months. The data were analyzed using SPSS 25.0 and SPSS PROCESS macro. RESULTS: In total, 82.52% of nurses were exposed to WPV. WPV not only affects mental health directly but also indirectly through mental resilience. Coping strategies had a moderating effect among WPV, mental resilience and mental health. When nurses coped with psychological violence with intolerance, WPV had a stronger negative effect on their mental health. When nurses coped with psychological violence with tolerance but coped with physical violence with intolerance, mental resilience had a stronger positive effect on their mental health. CONCLUSIONS: Good mental resilience and coping with psychological violence with tolerance while coping with physical violence with intolerance can help buffer WPV and promote mental health. CLINICAL RELEVANCE: Employers who have a "zero tolerance" policy regarding WPV need to re-examine how they currently operate.

Fournier, V., Léost, H., Zantman, F., et al. (2022). Évolution de la profession et de la formation infirmières Paris IGAS
<https://www.igas.gouv.fr/Evolution-de-la-profession-et-de-la-formation-infirmieres.html>

Dans un contexte d'augmentation des besoins et de crise du système de santé, l'IGAS (Inspection générale des affaires sociales) et l'IGESR (inspection générale de l'éducation, du sport et de la recherche) se sont vu confier une mission sur la profession infirmière afin de proposer des évolutions sur l'exercice professionnel des infirmiers et leur formation. Cette mission porte sur le « socle » de compétences infirmier tout en tenant compte des évolutions récentes de la pratique avancée et des protocoles de coopération. Les infirmiers constituent la première profession de santé sur le plan numérique. Le rapport analyse les parcours des étudiants et des professionnels sur leurs principaux lieux d'exercice en soulignant les enjeux majeurs d'attractivité auxquels la profession est confrontée aujourd'hui. L'analyse des exemples étrangers montre que l'autonomie et le champ de compétences infirmier peuvent être élargis sur plusieurs missions prioritaires, comme la prévention et la coordination du parcours, en réponse aux besoins de santé. La mission formule des orientations qui serviront de base à une concertation qui portera sur le degré d'évolution du champ de compétence infirmier. Pour cela, il sera essentiel d'intégrer dans la réflexion l'articulation avec les autres

professions de santé, en particulier les médecins. En outre, la montée en expertise des infirmiers doit être accompagnée d'une refonte de la formation initiale mais aussi par un accent sur la formation continue et la mise en place de passerelles professionnelles.

Girier, M. (2022). "Contenu du travail et charge en soins : recentrer les soignants sur le soin comme remède aux difficultés hospitalières ?" Santé RH : la lettre des ressources humaines dans les établissements sociaux et médico-sociaux:12-15.

L'hôpital public est confronté à une tension sans précédent sur le marché de l'emploi des personnels soignants, endémique dans un secteur d'activité en pleine expansion où les employeurs présentant de fortes sujétions sont naturellement moins plébiscités. Cette tension, qui se majorera dans les années à venir à fonction que ces marchés de l'emploi précédemment marqués par un corpus de valeurs très fort et un sens de l'engagement particuliers vont converger avec les tendances observées dans les autres secteurs d'activité - réduction de l'ancienneté moyenne, diversification des carrières, comparaison plus poussée entre les propositions des employeurs, rend plus que jamais nécessaire une réflexion sur le contenu du travail, sur les conditions de travail et sur les stratégies de fidélisation. (R.A.)

Gori, R., Bargain Dzarea, A. et al. (2022). "Le soin déserté." Pratiques : Les Cahiers De La Médecine Utopique(99)

Qu'est-ce qui fait encore tenir le système de soins alors qu'il est manifestement au fond du gouffre ? Les fermetures de services, faute de soignants pour les faire tourner, réduisent encore davantage une offre de soins déjà très insuffisante dans certaines régions. À la désertification territoriale s'ajoute une désertion inédite des soignants qui aggrave les difficultés de ceux qui restent et affrontent au quotidien une situation devenue extrêmement critique au cours de la dernière décennie. Or, les métiers du soin exigent un engagement et une motivation qui demandent à être encouragés et protégés par des conditions décentes de travail. C'est précisément ce qui fait défaut et qui conduit les professionnels à l'abandon. Dans une société qui compte tout ce qui se vend, il faudrait exiger que d'autres comptes soient mis en œuvre qui chiffrent le coût humain et financier de ces désertions et les considèrent à l'aune de leurs effets... Telles sont les problématiques abordées dans ce fascicule de la revue Pratiques.

Hakvoort, L., Dikken, J., Cramer-Kruit, J., et al. (2022). "Factors that influence continuing professional development over a nursing career: A scoping review." Nurse Educ Pract **65**: 103481.

AIMS: Systematically synthesize research about factors that influence CPD over a nursing career. BACKGROUND: Continuing professional development (CPD) in nursing is defined as 'a life-long process of active participation in learning activities that assist in developing and maintaining continuing competences, enhancing professional practice and supporting achievement of career goals'. Research has shown that inability to access resources and activities for CPD influences quality of care and adversely affects nurses' satisfaction, recruitment and retention. Although more and more research regarding CPD is done, a comprehensive overview about the needs of nurses for successful CPD is missing. DESIGN: Scoping review, using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for scoping reviews ensuring all quality standards are met. METHODS: Between February and April 2020 the electronic databases CINAHL, PubMed, Scopus, Psychinfo and Eric were searched as well as reference lists of included papers. Papers published in peer-reviewed journals were included without restrictions on publication date, design or setting. Thematic analysis was done to synthesize the data. RESULTS: The search yielded 2673 papers of which 60 papers were included. Analyses showed that factors that influence CPD differ over a nursing career, which led to the identification of three groups: newly graduated nurses; experienced nurses; and experienced nurses with ambitions for advanced roles. Furthermore, analyses showed that factors for all three groups are related to personal and contextual facilitators and barriers. Newly graduated nurses find it important to be an accepted member of the team. They experience barriers when integrating into the nursing profession, where they for instance experience workplace incivility. Experienced nurses

experience contextual barriers related to a lack of supportive structures and inaccessibility of CPD resources. There is limited time and availability of role models and a lack of support from managers and other colleagues. Moreover, the clinical care dynamics influence their ability to pursue CPD. For the experienced nurses with ambitions for advanced roles, an important barrier is that nursing culture emphasizes direct patient care. Often it is unclear what the value is of new nursing roles which makes it difficult for them to develop these. CONCLUSIONS: All nurses strive for CPD. However, organizations need to recognize nurses' personal goals and unique strategies as this leads to different needs in CPD. In addition, resources must be made available and accessible before CPD can be successfully pursued by all nurses.

Jimenez, C. L., Montanes, I. C., Carol, M., et al. (2022). "Quality of professional life of primary healthcare nurses: A systematic review." *J Clin Nurs* **31**(9-10): 1097-1112.

Aims To identify and critically appraise the available evidence on the overall quality of professional life of primary care nurses worldwide and its main influencing factors. **Background** Quality of professional life of healthcare workers is a keystone that influences the quality of healthcare services provided by healthcare organisations. Nurses have a key role as healthcare services providers given the growing shortage of doctors in primary care. **Design** A systematic review design in accordance with the PRISMA statement. **Methods** The search was conducted through MEDLINE (PubMed), CINAHL, SCOPUS, Scientific Electronic Library Online (SciELO) and Web of Science databases. The grey literature was reviewed at OpenGrey. The search was limited to human studies published from April 2010-April 2020. No limit of original language publication was applied. Three independent reviewers analysed the methodological quality of the studies. **Results** Ten studies were included from five countries. Five studies reported nurses were satisfied with their quality of professional life and the influencing factors identified were Workload, Job autonomy, Demographic variables, Management support, Recognition, Intrinsic motivation, Interpersonal relations, Compassion fatigue, Burnout, Turnover intention, and work was reported as a component of Quality of life. **Conclusion** Primary healthcare nurses reported a high level of quality of professional life, but the scarce studies found do not provide solid consistency to assess the overall quality of professional life. Perception of high workload was the most frequently identified factor to negatively influence the quality of professional life of nurses. **Relevance to clinical practice** Quality of professional life of primary care nurses is a key issue because of nurses' important relation with patient's care and satisfaction. Healthcare organisations should strive to address primary care nurses' quality of professional life to enhance their well-being and consequently patients' safety and high-quality healthcare services.

Johnson, K. E., Thurman, W. et Hoskote, A. (2022). "School Nurse Staffing in Texas Alternative High Schools: A Mixed Methods Exploration." *J of School Nursing*: 10598405221126178.

School nurses represent cost-effective investments in students' health and educational success. Alternative high schools (AHSs) serve an understudied population of youth who are at risk for school dropout and face numerous social inequities, heightening their risk for poor health outcomes. In this two-phase explanatory sequential mixed methods study, we examined school nurse staffing in Texas AHSs. Findings suggest Texas AHSs face understaffing for familiar reasons common across districts (e.g., lack of funding), but also reveal potential deeper inequities. Quantitative findings indicate 71% of Texas AHSs have some form of nursing support, most often an on-call or part-time nurse. Qualitative findings support and enrich this finding with insights into the negative consequences of not having a full-time nurse, indiscriminate approaches to staffing AHSs, and how AHSs can be the only school in the district without a full-time nurse. Altogether, our findings reveal opportunities to better support AHSs with adequate nursing support.

Joseph, B., Jacob, S., Lam, L., et al. (2022). "Factors influencing the transition and retention of mental health nurses during the initial years of practice: Scoping review." *J Nurs Manag* **30**(8): 4274-4284.

AIM: This review aims to identify the factors influencing the transition and retention of mental health nurses during the initial years of practice, recognize gaps in the literature and propose evidence-based

strategies. **BACKGROUND:** Mental health is a challenging specialty; recruitment, transition and retention of mental health nurses are known issues of concern. **EVALUATION:** The present study undertakes a scoping review to identify factors influencing the transition and retention of mental health nurses during the initial years of practice and the gaps in that research domain. A literature search was conducted using electronic databases. To gain an understanding of the topic of interest, the review of the literature extended from 2000 to 2022. **KEY ISSUES:** Existing evidence focuses on specific perspectives of transition. There is limited literature on factors influencing transition and retention among mental health nurses. Findings suggested that personal and professional factors could influence the transition and retention of mental health nurses during the initial years of practice. The main themes identified were personal attributes and professional factors with a number of subthemes. **CONCLUSION:** The scoping review identified only a few studies, which showed personal and professional factors related to the transition and retention of mental health nurses at the early stages of their career. **IMPLICATIONS FOR NURSING MANAGEMENT:** Potential benefits of effective transition and support with the understanding of factors influencing transition and retention of early career mental health nurses will enhance staff morale, sustainability of the workforce and better patient outcomes. Additionally, a few recommendations for nurse managers and leaders to improve transitional experiences and retention of early career nurses are highlighted.

Khatatbeh, H., Pakai, A., Al-Dwaikat, T., et al. (2022). "Nurses' burnout and quality of life: A systematic review and critical analysis of measures used." *Nurs Open* 9(3): 1564-1574.

BACKGROUND: Nurses' burnout might affect their quality of life, productivity and nursing care services. **AIM:** The aim of this systematic review was to systemically review the relationship between nurses' burnout and quality of life and to introduce practical recommendations to reduce nurses' BO and improve their QOL. **METHODS:** In April 2021, MeSH terms ("Nurses"[Mesh]) AND "Burnout, Professional"[Mesh]) AND "Quality of Life"[Majr] were used to search five electronic databases: CINAHL, PubMed, Medline, Psychology and Behavioral Sciences Collection and Google Scholar. **RESULTS:** The search produced 21 studies exploring nurses' burnout and their quality of life within the last ten years (2009-2021). Most of these studies found significant relationships between the burnout dimension(s) and quality of life dimension(s) among the nurses. **CONCLUSION:** Nurses have moderate to high levels of burnout and were negatively associated with poor quality of life. Interventional programs are needed to decrease nurses' burnout and improve their quality of life.

Kox, J., Runhaar, J., Groenewoud, J. H., et al. (2022). "Do physical work factors and musculoskeletal complaints contribute to the intention to leave or actual dropout in student nurses? A prospective cohort study." *J Sch Nurs* 39: 26-33.

BACKGROUND: Little is known, whether physical workload and musculoskeletal complaints (MSCs) have an impact on the intended or actual dropout of nursing students in the later years of their degree program. **PURPOSE:** Studying the determinants of intention to leave and actual dropout from nursing education. We hypothesized that physical workload and MSCs are positively associated with these outcomes. **METHODS:** A prospective cohort study among 711 third-year students at a Dutch Bachelor of Nursing degree program. Multivariable backward binary logistic regression was used to examine the association between physical work factors and MSCs, and intention to leave or actual dropout. **RESULTS:** Intention to leave was 39.9% and actual dropout 3.4%. Of the nursing students, 79% had regular MSCs. The multivariable model for intention to leave showed a significant association with male sex, working at a screen, physical activity, decision latitude, co-worker support, distress and need for recovery. The multivariable model for dropout showed a significant association with living situation (not living with parents), male sex, sick leave during academic year and decision latitude. **CONCLUSIONS:** Our research shows that the prevalence of MSCs among nursing students is surprisingly high, but is not associated with intention to leave nor with actual dropout.

Krocze, M. et Späth, J. (2022). "The attractiveness of jobs in the German care sector: results of a factorial survey." *The European Journal of Health Economics* 23(9): 1547-1562.
<https://doi.org/10.1007/s10198-022-01443-z>

The skilled labour shortage in nursing is an issue not unique to Germany. Unattractive characteristics of nursing jobs are one reason for the low supply in nursing personnel. In our study, we analyse the influence of job characteristics on the attractiveness of nursing jobs. We address this issue via factorial survey analysis, an experimental method particularly suited to assessing personal opinions and less prone to social desirability bias than standard interview methods. Around 1300 (current and former) nurses in a distinct region in Germany were asked to rate a set of synthetic job postings, each of which contained information on 9 systematically varied job characteristics. We find that, first, attractiveness of care jobs is most strongly affected by rather "soft" characteristics such as atmosphere within the team and time for patients. "Hard" factors play a considerably smaller role. Second, one hard factor, contract duration, is estimated to be among the most important job factors, however. This is a remarkable finding given that nursing occupations suffer from severe skill shortages. Third, though wage has a statistically significant influence on attractiveness, enormous wage raises would be needed to yield higher attractiveness gains than the top-rated soft factors, or to compensate for less pleasant job characteristics with respect to those factors. Last, even after controlling for other job characteristics, hospital nursing is still rated as more attractive than geriatric nursing.

La Rosa, G. et Maggio, M. G. (2022). "Mental Health of Nurses Working in a Judicial Psychiatry Hospital during the COVID-19 Pandemic in Italy: An Online Survey." *Healthcare (Basel)* **10**(4).

The onset of this new pandemic has highlighted the numerous critical issues at the organizational level, which involve both national healthcare and the judicial system. For this reason, nurses working in prisons may exhibit a poor quality of life, mainly related to their high level of work stress. This cross-sectional survey aimed to assess the emotional state of nurses working in the Judicial Psychiatry Hospital of Barcellona PG (Messina, Italy) during the COVID-19 pandemic. Data collection occurred twice: from 1 April to 20 May 2020 (i.e., during the Italian lockdown) and from 15 October to 31 December 2021 (during the second wave). At baseline, the 35 enrolled nurses presented medium to high levels of stress. At T1, they had a reduction in perceived personal achievement (MBI-PR $p = 0.01$), an increase in emotional exhaustion (MBI-EE $p < 0.001$), and stress (PSS $p = 0.03$), as well as anxiety (STAI Y1/Y2 $p < 0.001$). Most participants underlined the high usability of the online system (SUS: 69.50/SD 19.9). We also found increased stress, anxiety, and burnout risk in nursing staff. The study clearly demonstrates that the first year of the COVID-19 pandemic in Italy caused a worsening of mental health among nurses working in prisons. We believe that monitoring the mental state of healthcare professionals is fundamental to improving their quality of life and healthcare services.

Labrague, L. J. (2022). "Specific coping styles and its relationship with psychological distress, anxiety, mental health, and psychological well-being among student nurses during the second wave of the COVID-19 pandemic." *Perspect Psychiatr Care* **58**(4): 2707-2714.

PURPOSE: To identify specific coping skills that contribute to relieving anxiety and stress while supporting student nurses' mental health and psychological well-being. DESIGN AND METHOD: This is a cross-sectional online survey involving 261 students nurses from private and government-owned nursing schools in the Central Philippines. RESULTS: Resilience was associated with reduced stress and anxiety and better mental health and psychological well-being. Mental disengagement was associated with lower anxiety and stress levels. Spiritual and not scientific sources of support were associated with lower stress and increased psychological well-being and mental health. PRACTICE IMPLICATIONS: Nurse faculty should foster functional coping skills in student nurses to enhance their ability to endure negative psychological and mental health outcomes related to the pandemic.

Lafortune, G. et Balestat, G. (2022). "Médecins et infirmiers : leur nombre et leur rémunération en France et dans les autres pays de l'OCDE avant la pandémie." *Les Tribunes de la santé* **72**(2): 25-38.
<https://www.cairn.info/revue-les-tribunes-de-la-sante-2022-2-page-25.htm>

Les débats sur les personnels de santé en France et dans les autres pays de l'Organisation de coopération et de développement économiques (OCDE) ont été dominés ces dernières décennies par

la question des pénuries de main-d'œuvre et comment y remédier. En France, ces dix dernières années, les débats se sont concentrés plus particulièrement sur la question des « déserts médicaux », définis soit de manière large comme tout problème d'accès aux médecins ou aux hôpitaux dans certaines régions ou de manière plus spécifique comme des problèmes d'accès aux médecins généralistes. Cet article dresse un état des lieux de personnels de santé en France et dans les autres pays de l'OCDE en 2019 (juste avant la pandémie) et des évolutions au cours des vingt années précédentes, en se concentrant sur les médecins et les infirmiers. En France comme dans presque tous les pays de l'OCDE, le nombre de médecins et d'infirmiers par habitant a augmenté entre 2000 et 2019, mais à des rythmes différents et peut-être pas suffisamment pour répondre aux besoins croissants des populations vieillissantes, d'où des problèmes persistants de pénurie. Les politiques pour remédier aux problèmes de pénurie de main-d'œuvre passent par une augmentation de la formation et du recrutement de nouveaux médecins et d'infirmiers, ainsi que par une amélioration des conditions de travail et des rémunérations du personnel moins bien rémunéré pour accroître l'attractivité des emplois et réduire les départs. Cet article compare le niveau et l'évolution de la rémunération des médecins et des infirmiers en France et dans les autres pays de l'OCDE, tout en pointant les limites de la comparabilité des données disponibles.

Lucas, G., Colson, S., Boyer, L., et al. (2022). "Risk factors for burnout and depression in healthcare workers: The national AMADEUS study protocol." *Encéphale* **48**(3): 247-253.

CONTEXT: Burnout is an international phenomenon defined as a state of professional exhaustion. It can lead to depression and have major economic and organizational impacts. Previous studies of healthcare professionals in France have focused on physicians, but none to date have explored other healthcare professions. OBJECTIVES: The main objective of our study is to determine the prevalence of burnout among healthcare workers. The secondary objectives are to explore the associations of burnout with professional and psycho-social factors and the risk of depression, professional harassment, sexual harassment, sexual-orientation based discrimination, consumption of antidepressants, anxiolytics and also the lifestyle of the individual: smoking, alcohol consumption, coffee consumption, physical activity and sleep quality. MATERIALS AND METHODS: The survey will take the form of a voluntary and anonymous online questionnaire carried out on the FramaForm1® platform and will be disseminated via social networks, professional networks and mailings. STUDY POPULATION: Senior doctors, interns, directors of care, nurses, head nurses and senior head nurses, physiotherapists and occupational therapists, dieticians, radiology technicians, laboratory technicians, psychologists, nurses' aides, auxiliary nurses and midwives will be included. COLLECTED DATA: Burnout will be measured with the Maslach Inventory burnout (MBI) questionnaire, work environment with the Karasek questionnaire and anxiety, depression risk with the Center for Epidemiologic Studies-Depression (CES-D), physical activity with the Global Physical Activity Questionnaire (GPAQ) and sleep quality with the Pittsburgh Sleep Quality Index (PSQI). ETHICS: This protocol has been accepted by the ethical committee (IRB n°C08/21.01.06.93911, CNIL). EXPECTED RESULTS: Based on international studies, we expect a high rate of burnout with disparities according to profession, socio-demographic data, seniority and type of service. We also expect a significant rate of untreated depression. This study will provide evidence for policy makers to implement collective strategies to reduce burnout and depression in the different populations studied.

Lucas, G., Colson, S., Boyer, L., et al. (2022). "Work environment and mental health in nurse assistants, nurses and health executives: Results from the AMADEUS study." *J. Nursing Management* **30**(7): 2268-2277.

AIM: This study aimed to explore work environment and mental health in nurse assistants, nurses and health executives in a national large-scale study. BACKGROUND: We have data for physicians but not for other health care workers categories. METHODS: A total of 6935 participants were recruited between May and June 2021 by professional mailings and professional networks. RESULTS: All professional categories reported high rates of high psychological demand (>90%), low social support (>60%), burnout (50% to 60%), exposure to potentially morally injurious events (>40%) and depression (approximately 30%). Surgery nurses reported the highest exposure to potentially morally injurious events. Major depression was identified in approximately 30% of participants in all categories, but less

than 10% reported consuming antidepressants. A total of 31% to 49% of participants reported sleep disorders and 16% to 21% reported consuming regularly hypnotics. Physicians reported high hazardous drinking behaviour and nurse assistant high smoking rates. Conclusions and implications for nursing management: Our results suggest that preventing burnout and depression in health care workers is a priority. To reach this goal, nursing managers could develop some interventions to reduce psychological demand and increase personal accomplishment and social support between colleagues, and prevent sustained bullying at the workplace and health risk behaviours. These interventions should be further developed and evaluated.

MacPhee, M., Li, T. M., Pien, L. C., et al. (2022). "Effects of work conditions and organisational strategies on nurses' mental health during the COVID-19 pandemic." *Healthcare (Basel)* **30**(1): 71-78.

AIMS: This study aims to examine coronavirus disease 2019 (COVID-19) pandemic-related work factors for adverse effects on the mental health and whether organisational strategies attenuate these effects. **BACKGROUND:** COVID-19 pandemic has led to increased work burden and mental health risks for nurses. **METHODS:** A total of 1499 Taiwanese full-time nurses completed a web-based questionnaire between July and December 2020. Pandemic-related work conditions, namely, increased working hours, caring for COVID-19 patients, occupational stigma and redeployment, were assessed. Organisational strategies to combat pandemic-related work stressors including compensation to workers and adequate protection equipment were surveyed. Outcome measures were intention to leave, burnout and depression assessed using validated questionnaires. **RESULTS:** Redeployment, increased working hours and occupational stigma were associated with adverse mental health and intention to leave in logistic regression analysis. Caring for COVID-19 patients was negatively associated with depression. Adequate compensation for workers modified the association between redeployment and burnout. **CONCLUSIONS:** Pandemic-related work conditions were associated with adverse mental health and intention to leave. Organisational strategies attenuated the adverse impact of the pandemic. **IMPLICATIONS FOR NURSING MANAGEMENT:** Efforts to decrease stigma and organisational strategies including compensation for workers and adequate protection equipment provision should be adopted to improve nurses' health during a pandemic.

Maideen, A. A. et Idris, D. R. (2022). "Nurses' mental health and coping strategies throughout COVID-19 outbreak: A nationwide qualitative study." *Int J Ment Health Nurs* **31**(5): 1213-1227.

This qualitative exploratory study explored nurses' mental health and coping strategies working with suspected and confirmed COVID-19 patients in Brunei Darussalam. Eleven focus group discussions were conducted between October 2020 and January 2021, involving 75 participants. Three themes emerged: 'COVID-19 roller-coaster transitional journey' explained the different psychological responses of the journey of the nurses from merely hearing about COVID-19 from far to the invasion of the virus and community outbreak in the country; 'Mind my mind and heart' share experiences of the nurses in terms of their mental health and emotional responses; and 'the psychosocial system' described the coping mechanisms of the nurses throughout the COVID-19 pandemic. Nurses' mental health and coping strategies during the COVID-19 pandemic influenced how they provided care and performed other tasks, which should not be taken for granted. Nurses employed psychosocial coping methods at the different phases of the COVID-19 pandemic and support from family, friends, the public, and the governmental level. This research is fundamental as a basis for other countries to design psychological interventions during this yet unsettled COVID-19 pandemic.

Marshman, C., Hansen, A. et Munro, I. (2022). "Compassion fatigue in mental health nurses: A systematic review." *J Psychiatr Ment Health Nurs* **29**(4): 529-543.

Accessible Summary What is known on the subject? Compassion fatigue is the result of the unique stressors inherent in caregiving work, leading to a loss of compassion in clinical practice that may result in negative outcomes for mental healthcare consumers. Compassion fatigue has clear emotional and physical costs and significant impacts on staff recruitment and retention. What the paper adds to existing knowledge? This review is the first to evaluate the quantitative literature on compassion

fatigue in mental health nurses. Research on compassion fatigue in mental health nurses does not accurately account for the unique care relationship between nurse and consumer. Competency-based education, strong mental health nurse leadership, positive organizational cultures, clinical supervision and reflection alongside individual self-care strategies may mitigate compassion fatigue. What are the implications for future practice? Resources are urgently needed for education and workforce development that addresses compassion fatigue in mental health nurses. Interventions addressing the physical, cognitive and emotional demands of care work are needed to ensure mental health nurses have the capability to provide sustainable compassionate care to consumers. Introduction Although compassionate care is an essential component of mental health nursing, understandings of the impact of compassion fatigue is poorly understood. Aims/Questions To examine and synthesize available data on the prevalence of compassion fatigue within mental health nurses and consider what variables impact compassion fatigue. Method A search of MEDLINE, EMBASE, PsychINFO, Emcare, Web of Science, Scopus, CINAHL and grey literature for articles published between 1992 and February 2021 was conducted. Data were extracted from articles meeting inclusion criteria and integrated using narrative synthesis. Results Twelve articles were included. Prevalence of compassion fatigue ranged from low to high. Variables were identified that may mitigate the risk of compassion fatigue. Strong leadership and positive workplace cultures, clinical supervision, reflection, self-care and personal well-being may protect mental health nurses against compassion fatigue. Discussion Future research is needed on mental health nurses lived experience of compassion fatigue and their understandings of compassion. Implications for Practice Interventions should focus on increasing awareness of compassion fatigue and building individual and organizational resilience. Both organizations and individuals should be aware of the role they play in maintaining the capacity and capability for mental health nurses to provide sustainable and compassionate mental healthcare.

Özkan, A. H. (2022). "The effect of burnout and its dimensions on turnover intention among nurses: A meta-analytic review." *J Nurs Manag* **30**(3): 660-669.

AIM: The objective of this study is elaborating on the relationship between burnout and turnover intention. BACKGROUND: Burnout and its dimensions have a significant effect on turnover intention. EVALUATION: Meta-analysis technique is used. Forty-four studies were brought together to form four data sets. These data sets were heterogeneous, and they did not include publication bias. The effect sizes of burnout, emotional exhaustion, depersonalization and professional efficacy on turnover intention among nurses were computed. KEY ISSUES: Random-effects model was used. The groups including two or more studies were added into moderator analysis. CONCLUSIONS: The effect size of the relationship between professional efficacy and turnover intention was small, and the effect size of the other surveyed relationships was medium among both nurses and other health employees. The moderator analysis results suggested that the effect size of the relationship between professional efficacy and turnover intention among nurses is significantly different from the other health employees. Being a nurse was determined as a significant moderator for the relationship between professional inefficacy and turnover intention, and it weakened this relationship. IMPLICATIONS FOR NURSING MANAGEMENT: The findings of this study can be used by health managers as burnout and turnover intention are important to determine organizational policies.

Penso, A., Loundou, D. A., Lehucher-Michel, M. P., et al. (2022). "Mise au point sur l'effet du travail en 12heures de jour chez le personnel infirmier hospitalier et sur la prise en charge des patients." *Archives des Maladies Professionnelles et de l'Environnement* **83**(6): 545-557.
<https://doi.org/10.1016/j.admp.2022.07.001>

Résumé Objectif L'objectif de cette revue est de faire le point sur les sources de données existantes et d'identifier l'impact que les postes en 12h ont sur les infirmiers hospitaliers et par voie de conséquence sur les patients. Méthode La recherche a été effectuée sur les bases de données PubMed, Embase et LiSSa et complétée par une analyse attentive des références bibliographiques pour une période allant de 2000 à 2022. Les études incluses explorent les effets du travail en 12heures sur les infirmiers hospitaliers et sur les patients. Les études explorant les conséquences sur le système de gestion hospitalière ont été également retenues. Résultats Au total, 26 études ont été sélectionnés.

Vingt ont exploré les effets du travail en 12 heures sur les infirmiers ; les résultats montrent que ce type d'aménagement horaire peut avoir un impact négatif sur le sommeil et la vigilance, ainsi que sur la satisfaction, le bien-être psychophysique et le système musculosquelettiques. Les 9 études explorant les effets des 12 heures sur la prise en charge des patients ne montrent pas une véritable augmentation des erreurs et des événements indésirables ; toutefois, les infirmiers rapportent une mauvaise perception de la qualité de leurs soins. Deux études ont exploré les répercussions sur le système de gestion hospitalière, avec des résultats contradictoires. Conclusions Le travail en 12 heures peut avoir des effets négatifs sur la santé des infirmiers, avec des possibles répercussions sur la prise en charge des patients. Les agents qui travaillent selon cette modalité devraient bénéficier d'un suivi médical adapté.

Poulin-Grégoire, D. et Martin, P. (2022). "Effets de la violence verticale sur le travail d'infirmières soignantes exerçant en milieux hospitaliers : une étude exploratoire." *Recherche en soins infirmiers* **151** : 30-42.

Plus de 39,7 % des infirmières se déclarent victimes de harcèlement psychologique dans leur milieu de travail. Dans 60 % des cas, il est question de violence verticale impliquant une personne en supériorité hiérarchique. Peu d'études abordent ce phénomène sans le confondre avec d'autres formes de violence en milieu de travail. Cette étude visait à décrire l'effet de la violence verticale vécue par des infirmières soignantes exerçant en milieux hospitaliers. Une collecte des données par entrevues semi-dirigées a été réalisée auprès de six infirmières de milieux hospitaliers de la province de Québec (Canada). La phénoménologie descriptive a été utilisée dans le cadre de la présente étude. La représentation globale des effets de la violence verticale vécue par des infirmières soignantes en milieux hospitaliers se traduit par un détournement des initiatives infirmières qui renvoient à des soins diligents et personnalisés. Il est recommandé que les politiques organisationnelles contre la violence verticale, mises en place dans les centres hospitaliers, soient appliquées de façon rigoureuse et transparente. D'autres études seraient appropriées afin de préciser les facteurs organisationnels favorisant la violence verticale en milieux hospitaliers.

Sattar, K., Yusoff, M. S. B., Arifin, W. N., et al. (2022). "Effective coping strategies utilised by medical students for mental health disorders during undergraduate medical education-a scoping review." *BMC Med Educ* **22**(1): 121.

BACKGROUND: Coping denotes cognitive, emotional and behavioural struggles to tackle a troubled person-environment association. Therefore, coping strategies (CSs) are vital for mental well-being. Widespread research studies have explored this domain, targeting caregivers, nurses, physicians and medical teachers, but limited research has been done to explore the common CSs utilised by medical students at the undergraduate medical education level. Therefore, we aimed to identify the frequently occurring CSs and their effects on mental health disorders (MHDs) through the evidence available in the existing literature. METHODS: For this scoping review, we searched the available literature (articles published from January 1, 1986, to March 31, 2021) on CSs at Google Scholar, PubMed and Scopus using the terms coping, medical students and undergraduate medical education. We included in our search all peer-reviewed journal articles whose central topics were the CSs employed by undergraduate medical students of any age, nationality, race and gender. RESULTS: From among the 2,134 articles that were found, 24 were ultimately included in the study. The articles were authored in 14 countries, allowing us to gather broader data to answer our research question. The first identified theme (MHDs) had four subthemes: stress (55% of the articles), depression (30%), anxiety (25%) and burnout (15%). The second theme (CSs), on the other hand, had eight subthemes: support seeking (60%), active coping (40%), acceptance (40%), avoidance/denial (40%), substance abuse (35%), faith/religion (25%), sports (25%) and miscellaneous (40%). CONCLUSIONS: Themes and subthemes were identified about the most common CSs utilised by undergraduate medical students to tackle common MHDs in the context of medical education. Among the most used CSs was support (social and emotional) seeking. Teaching medical students how to cope with challenging times is essential.

Schug, C., Geiser, F., Hiebel, N., et al. (2022). "Sick Leave and Intention to Quit the Job among Nursing Staff in German Hospitals during the COVID-19 Pandemic." *Int J Environ Res Public Health* **19**(4): 1947.

<https://www.mdpi.com/1660-4601/19/4/1947>

Background: Sick leave and turnover of nurses exacerbate an already existing nursing shortage during the COVID-19 pandemic in Germany and other countries. Frequency and associated factors of sick leave and intention to quit among nurses need to be examined to maintain healthcare. Methods: An online survey among nursing staff (N = 757) in German hospitals was conducted between May and July 2021. Sick leave days, intention to quit, working conditions, depression, anxiety and sleep disorder symptoms, effort-reward imbalance (ERI), COVID-19-related and sociodemographic variables were measured. Regression analyses were performed. Results: The intention to quit was present in 18.9%. One third (32.5%) reported sick leave of ≥ 10 and 12.3% more than 25 days in 12 months. Significant predictors for ≥ 10 sick leave days were infection with SARS-CoV-2, a pre-existing illness, exhaustion, trust in colleagues and fear of becoming infected. Higher ERI reward levels, perception of sufficient staff and contact with infected patients were associated with lower odds for ≥ 10 sick leave days. Lower reward levels, having changed work departments during the pandemic, working part-time and higher depression levels significantly predicted turnover intention. Conclusion: Alarming, many nurses intend to quit working in healthcare. Perceived reward seems to buffer both sick leave and turnover intention. Enhancing protection from COVID-19 and reducing workload might also prevent sick leave. Depression prevention, improved change management and support of part-time workers could contribute to reducing turnover intention among nurses.

Skillman, D. et Toms, R. (2022). "Factors Influencing Nurse Intent to Leave Acute Care Hospitals: A Systematic Literature Review." *J Nurs Adm* **52**(12): 640-645.

Professional nurses are leaving their current positions in acute care hospitals and, in some cases, the profession in greater numbers than ever. Nurse leaders must understand factors surrounding nurses' intent to leave to develop strategies to mitigate this phenomenon and retain nurses. This review of the literature seeks to synthesize studies on nurses' intent to leave. Themes include job satisfaction, resources and staffing impacting workloads, leadership, and burnout.

Ślusarz, R., Cwiekala-Lewis, K., Wysokiński, M., et al. (2022). "Characteristics of Occupational Burnout among Nurses of Various Specialties and in the Time of the COVID-19 Pandemic-Review." *Int J Environ Res Public Health* **19**(21).

Occupational burnout is particularly common among nurses due to their work being associated with stress, showing understanding, compassion, and commitment, along with the simultaneous need to maintain the necessary emotional distance. The aim of this review was to assess the occurrence and characterization of burnout among nurses working within neurology, geriatric care, intensive care units and with patients infected with the novel COVID-19 virus. PRISMA guidelines were used to conduct the review. The search for literature was limited to articles meeting the inclusion criteria and published from 2017 to 2022 in PubMed, Scopus, Science Direct, Google Scholar, and Wiley. A total of 768 articles from this category have been found. Ultimately, after in-depth analysis, 20 articles were included in the study. The group of respondents ranged from 49 to 3100 participants. According to the data, the percentages of nurses suffering from burnout in the presented research ranged from 14.3% to 84.7%, with the highest value of burnout among nurses who worked in the ICU during the COVID-19 pandemic. There are certain factors among nurses that significantly affect the occurrence of burnout. These include, among others, working time, age, exposure to infection and contact with infected patients, lack of training on COVID-19 prevention, providing care to an increased number of COVID-19 patients per shift, lack of personal protective equipment, lack of support of administration, lack of pay satisfaction, intrinsic motivation and turnover intention.

Stemmer, R., Bassi, E., Ezra, S., et al. (2022). "A systematic review: Unfinished nursing care and the impact on the nurse outcomes of job satisfaction, burnout, intention-to-leave and turnover." *J Adv Nurs* **78**(8): 2290-2303.

Aim: To investigate the association of unfinished nursing care on nurse outcomes. Design: Systematic review in line with National Institute for Health and Care Excellence guideline. Data sources: CINAHL,

the Cochrane Library, Embase, Medline, ProQuest and Scopus databases were searched up until April 2020. Review Methods: Two independent reviewers conducted each stage of the review process: screening eligibility, quality appraisal using Mixed Methods Appraisal Tool; and data extraction. Narrative synthesis compared measurements and outcomes. Results: Nine hospital studies were included, and all but one were cross-sectional multicentre studies with a variety of sampling sizes (136-4169 nurses). Studies had low internal validity implying a high risk of bias. There was also a high potential for bias due to non-response. Only one study explicitly sought to examine nurse outcomes as a primary dependent variable, as most included nurse outcomes as mediating variables. Of the available data, unfinished nursing care was associated with: reduced job satisfaction (5/7 studies); burnout (1/3); and intention-to-leave (2/2). No association was found with turnover (2/2). Conclusion: Unfinished nursing care remains a plausible mediator of negative nurse outcomes, but research is limited to single-country studies and self-reported outcome measures. Given challenges in the sector for nurse satisfaction, recruitment and retention, future research needs to focus on nurse outcomes as a specific aim of inquiry in relation to unfinished nursing care. Impact: Unfinished nursing care has previously been demonstrated to be associated with staffing, education and work environments, with negative associations with patient outcomes (patient satisfaction, medication errors, infections, incidents and readmissions). This study offers new evidence that the impact of unfinished nursing care on nurses is under investigated. Policymakers can prioritize the funding of robust observational studies and quasi-experimental studies with a primary aim to understand the impact of unfinished nursing care on nurse outcomes to better inform health workforce sustainability.

Trochet, C., Pavillet, J. et Prieur, F. (2022). "Le travail de nuit (Dossier)." *Revue Infirmière* **280** 15-31.

Dans les hôpitaux français, la continuité des soins est assurée vingt-quatre heures sur vingt-quatre. Le Code du travail encadre l'exercice de nuit, et les équipes de la médecine du travail sont impliquées dans la surveillance de la santé des professionnels concernés. La nuit, l'organisation est propre à chaque unité de soins. La coordination du travail est orchestrée par les cadres de santé qui assurent la communication entre les équipes de jour et de nuit. Leur vigilance est primordiale pour garantir la qualité et la sécurité des prises en charge.

Uluşinar, F. et Erden, Y. (2022). "Intention to leave among nurses during the COVID-19 outbreak: A rapid systematic review and Meta-Analysis." *J Clin Nurs*. **33**(1):393-403

AIMS AND OBJECTIVES: The COVID-19 pandemic has caused an increase in the workload of nurses and changes in working conditions. Stress and the increase in workload during the COVID-19 pandemic had a negative effect on nurses' intention to leave. This study aimed to determine the current rate of intention to leave the job among nurses during the COVID-19 outbreak by conducting a rapid systematic review and meta-analysis. **METHODOLOGY/METHODS:** The review procedure was conducted by the PRISMA criteria. The researchers searched PubMed and Web of Science databases for studies providing the rate of nurses' intent to leave, published until 31 December 2021. Heterogeneity was assessed using the I(2) test, and publication bias was measured by Egger's test. **RESULTS:** The estimated overall intent to leave the profession among nurses during the COVID-19 pandemic was 31.7% (95% CI: 25%-39%) with significant heterogeneity (Q test: 188.9; p = 0.0001; I(2) : %95.2; Tau(2) : 0.225). Additionally, Egger's regression test suggested no publication bias for estimating the pooled rate of nurses' intent to leave during the COVID-19 outbreak. **NO PATIENT OR PUBLIC CONTRIBUTION:** Since the research is a meta-analysis study, a literature review model was used. Ethics committee approval was not obtained because the literature review did not directly affect humans and animals. **CONCLUSION:** This study showed that approximately one-third of nurses working during the COVID-19 pandemic had thoughts about intending to leave their job. The findings indicate the need for strategies involving precautions and solutions to minimise the psychological impacts of COVID-19 among nurses. **RELEVANCE TO CLINICAL PRACTICE:** In this period when the global nurse crisis exists, it is of great importance for institutions to retain their nurse workforce. There is an urgent need to prepare nurses to cope better with COVID-19 pandemic. Identification of risk factors for intention to leave could be a significant weapon giving nurses and healthcare systems the ability to respond in a better way against the following COVID-19 waves in the near future.

Urban, R. W., Rogers, M. R., Eades, T. L., et al. (2022). "Resilience, Stress, Anxiety, and Depression: Exploring the Mental Health of New Graduate Nurses Transitioning to Practice During COVID-19." Int J Ment Health Nurs **53**(12): 533-543.

Background Transitioning to practice during the COVID-19 pandemic multiplied the stressors and challenges typically encountered by new graduate nurses (NGNs), yet research exploring mental health variables of this subset of nurses remains sparse. Method This study used an observational design and convenience sampling. NGN alumni (n = 192) from a pre-licensure nursing program were surveyed during the summer of 2021 regarding their experiences with resilience, anxiety, depression, and stress while transitioning to practice during the COVID-19 pandemic. Results Participants reported moderate to severe levels of stress (76%), anxiety (27.6%), and depression (31.2%) while transitioning to practice. Most (79%) described themselves as resilient. The highest mean scores for stress, anxiety, and depression occurred during the fourth to eighth month of practice. Conclusion Nursing professional development specialists, managers, and other stakeholders need effective strategies to monitor and promote NGNs' well-being and mental health to prevent burnout and turnover throughout the first year of practice. [J Contin Educ Nurs. 2022;53(12):533-543.].

Wang, J., Zeng, Q., Wang, Y., et al. (2022). "Workplace violence and the risk of post-traumatic stress disorder and burnout among nurses: A systematic review and meta-analysis." J Nurs Manag **30**(7): 2854-2868.

AIM: This review examined the association between workplace violence and the risk of post-traumatic stress disorder (PTSD) and burnout among nurses. BACKGROUND: The extent to which workplace violence is associated with an increased risk of PTSD and burnout in nurses remains unclear. EVALUATION: We searched nine electronic databases (PubMed, Cochrane, Embase, Web of Science, CINAHL, PsycINFO, Chinese Biomedical, China National Knowledge Internet and WANFANG). KEY ISSUES: Overall, 114 full-text studies were identified; 43 met the inclusion criteria, of which 10 were included in the meta-analysis. Compared to their counterparts with non-exposure to workplace violence, nurses experiencing it had 2.13 and 2.25 times higher odds of reporting PTSD and burnout after adjusting the confounding factors. Additionally, the moderator and mediator factors might help reduce the risk of both in this population. CONCLUSION: This study indicated that workplace violence increases the risk of PTSD and burnout. IMPLICATIONS FOR NURSING MANAGEMENT: Our review identified the magnitude of the association between exposure to workplace violence and the reported symptoms of PTSD and burnout in nurses. Furthermore, multi-targeted efforts directed at the identified social/organizational, task-related and individual resources might help mitigate their harmful impact in the aforementioned population.

Woodward, K. F. et Willgerodt, M. (2022). "A systematic review of registered nurse turnover and retention in the United States." Nursing Outlook **70**(4): 664-678.

Background: The pandemic has highlighted the struggles of nurses and risks of workforce shortages. Analysis of nurses' job decisions is necessary to mitigate these risks. Purpose: The purpose of this systematic review was to understand factors associated with registered nurse (RN) work outcomes in the United States, and to examine the inclusion of equity and wellness concepts in this body of literature. Methods: This review utilized the Preferred Reporting Items for Systematic reviews and Meta-Analyses protocol. Studies from PubMed and CINAHL were included if they focused on RNs in the United States in the past 10 years. A total of 34 studies are included in the review. Findings: RN work outcomes are impacted by individual, unit level, and organizational factors. Few studies address equity, and many only address RN health in terms of burnout. Discussion: Future work needs to draw samples from broader practice settings, focus on interventions that promote positive outcomes, and focus on equity and the wellbeing of Incite this article: Woodward, K.F., Willgerodt, M., (2022, July/August). A systematic review of registered nurse turnover and retention in the United States. Nurs Outlook, 70(4), 664-678. <https://doi.org/10.1016/j.outlook.2022.04.005>.

Zangaro, G. A., Dulko, D., Sullivan, D., et al. (2022). "Systematic Review of Burnout in US Nurses." Nursing Clinics of North America **57**(1): 1-20.

Burnout in the health professions has been a concern for several decades. During the COVID-19 pandemic burnout has emerged as a significant concern for nurses as well as health care organizations.¹ The demand for nursing services has increased significantly during this pandemic, and nurses have experienced increased levels of burnout. Burnout is included in the 11th Revision of the International Classification of Diseases as a condition resulting from chronic workplace stress that has not been

Almenyan, A. A., Albuduh, A. et Al-Abbas, F. (2021). "Effect of Nursing Workload in Intensive Care Units." Cureus Journal of Medical Science **13**(1).

Nursing work efforts are important in providing sound healthcare services, especially in the intensive care units (ICU). Complications and adverse events are more liable to occur among patients in the ICU and these patients require more attention and nursing care. Most of the research in this field is mainly focused on the effect of staffing and its correlation to patient safety and satisfaction. Previous studies also showed that reduced nursing staffing was significantly associated with the development of pneumonia in ICU patients who needed more nursing requirements. An increase in nursing workload is also significantly associated with an increased incidence rate of nosocomial infections. The association between nursing workload in ICU patients and increased incidence rates of mortality is also supported by previous studies. The nurse-to patient ratio has been previously used to evaluate patient safety correlation with the nursing workload as reported by previous reports. However, previous research shows that the nursing workload is a more complex correlation and can not be determined by a simple ratio as the nurse-to-patient one. Evidence shows that many adverse events may occur with patients in the ICU secondary to reduced nursing care such as increased mortality, length of hospital stay, and catching in-hospital infections. In the current study, we aim to review the outcomes from previous investigations to further emphasize the effect of nursing workload on ICU patient outcomes and safety.

Bakker, E. J. M., Roelofs, P., Kox, J., et al. (2021). "Psychosocial work characteristics associated with distress and intention to leave nursing education among students; A one-year follow-up study." Nurse Educ Today **101**: 104853.

BACKGROUND: Dropout in later years of the nursing degree programme involves lost investment and is a particular problem for both students and educators. Reasons for late dropout seem to be related to the work and learning environment of the clinical placement. **OBJECTIVES:** The aim of this study was to investigate associations between psychosocial work characteristics and distress and intention to leave nursing education among third-year nursing students. **DESIGN:** A prospective cohort study. **SETTING:** A Bachelor of Nursing programme of a University of Applied Sciences in the Netherlands. **PARTICIPANTS:** 363 third-year nursing students. **METHODS:** Baseline and one-year follow-up measurements were used from a prospective cohort study. Third-year nursing students were invited annually in May between 2016 and 2018. Psychosocial work characteristics were psychological demands, supervisor and co-worker support, and acts of offensive behaviour. Logistic regression analyses were used to build multivariate models. **RESULTS:** Frequent exposure to violence (OR = 2.52, 95% CI: 1.29-4.92) was univariately associated with distress. In the multivariate model for distress, psychological demands (OR = 1.63, 95% CI: 1.05-2.52) and frequent exposure to violence (OR = 3.02, 95% CI: 1.48-6.19) were associated with distress. Supervisor support (OR = 0.54, 95% CI: 0.36-0.80) and co-worker support (OR = 0.41, 95% CI: 0.24-0.72) were negatively associated with intention to leave (i.e. were protective) in the univariate model. In the adjusted multivariate model, only co-worker support (OR = 0.50, 95% CI: 0.25-0.97) was a protective factor for an intention to leave. **CONCLUSION:** Psychological demands and frequent exposure to violence are risk factors for distress, and co-worker support is a protective factor reducing the intention to leave nursing education in the last stage of the programme. Improving the psychosocial working climate of nursing students may reduce the intention to leave at a late stage in nursing education, and hence actual late dropout.

Chen, C. et Meier, S. T. (2021). "Burnout and depression in nurses: A systematic review and meta-analysis." Int J Nurs Stud **124**: 104099.

BACKGROUND: Nurses work in stressful and demanding settings and often suffer from depression and burnout. Despite overlapping symptoms, research has been inconclusive regarding the discriminant validity of measures of burnout with regard to measures of depression. Such inconclusive discriminant validity might cause clinicians to fail to recognize and manage depression separately from burnout. **OBJECTIVES:** This meta-analysis aimed to clarify the distinctiveness of burnout as a separate construct by examining the size of the relationship between burnout and depression among nurses as well as potential moderators. **METHOD:** A stepwise method was used by searching 4 databases (PubMed, CINAHL, PsycINFO, and EMBASE) to retrieve published papers in English examining the relationship between burnout and depression among nurses and reporting the effect sizes of their findings. **RESULTS:** We identified a total of 37 eligible studies. The pooled estimate showed a positive association between burnout and depression among nurses ($r = 0.403$, 95% CI [0.327, 0.474], $p < 0.0001$) and a slightly higher correlation coefficient for the Emotional Exhaustion subscale of the Maslach Burnout Inventory (MBI) measure (0.494, 95% CI [0.41, 0.57]). **CONCLUSIONS AND IMPLICATIONS:** This review confirms a large burnout - depression correlation in nursing samples, adding to existing literature encompassing a variety of occupations. Future studies should focus on path analysis to assess the causal relationship as well as investigate potential moderators.

Ching, S. M., Ng, K. Y., Lee, K. W., et al. (2021). "Psychological distress among healthcare providers during COVID-19 in Asia: Systematic review and meta-analysis." *PLoS One* **16**(10): e0257983.

INTRODUCTION: COVID-19 pandemic is having a devastating effect on the mental health and wellbeing of healthcare providers (HCPs) globally. This review is aimed at determining the prevalence of depression, anxiety, stress, fear, burnout and resilience and its associated factors among HCPs in Asia during the COVID-19 pandemic. **MATERIAL AND METHODS:** We performed literature search using 4 databases from Medline, Cinahl, PubMed and Scopus from inception up to March 15, 2021 and selected relevant cross-sectional studies. Publication bias was assessed using funnel plot. Random effects model was used to estimate the pooled prevalence while risk factors were reported in odds ratio (OR) with 95% CI. **RESULTS:** We included 148 studies with 159,194 HCPs and the pooled prevalence for depression was 37.5% (95%CI: 33.8-41.3), anxiety 39.7(95%CI: 34.3-45.1), stress 36.4% (95%CI: 23.2-49.7), fear 71.3% (95%CI: 54.6-88.0), burnout 68.3% (95%CI: 54.0-82.5), and low resilience was 16.1% (95%CI: 12.8-19.4), respectively. The heterogeneity was high ($I^2 > 99.4\%$). Meta-analysis reported that both females (OR = 1.48; 95% CI = 1.30-1.68) and nurses (OR = 1.21; 95%CI = 1.02-1.45) were at increased risk of having depression and anxiety [(Female: OR = 1.66; 95% CI = 1.49-1.85), (Nurse: OR = 1.36; 95%CI = 1.16-1.58)]. Females were at increased risk of getting stress (OR = 1.59; 95%CI = 1.28-1.97). **CONCLUSION:** In conclusion, one third of HCPs suffered from depression, anxiety and stress and more than two third of HCPs suffered from fear and burnout during the COVID-19 pandemic in Asia.

Dancot, J., Pétré, B., Dardenne, N., et al. (2021). "Exploring the relationship between first-year nursing student self-esteem and dropout: A cohort study." *J Adv Nurs* **77**(6): 2748-2760.

AIM: To describe nursing student self-esteem prior to the influence of nursing education and to explore the relationship between self-esteem and dropout. **DESIGN:** Cohort study. **METHODS:** At the beginning of their first year of study, in October 2017, 464 nursing students completed a questionnaire that assessed their self-esteem level via Tafarodi & Swann Scale and self-esteem profile following Mruk's model, along with sociodemographic information, state anxiety, self-efficacy, intention to continue and social support. One year later, data on grades and re-enrolment were collected. Multivariate analyses explored the factors influencing self-esteem level (multiple regression), self-esteem profile (multinomial logistic regression) and dropout (binary logistic regression). **RESULTS/FINDINGS:** The mean level of self-esteem was 50.8 (9.0), scale of 16 to 80. Forty-nine per cent of self-esteem profiles were classified as 'high', 20.1% as 'defensive acceptance based', 11.2% as 'defensive achievement based' and 19.6% as 'low'. State anxiety ($p < 0.0001$), self-efficacy about completion of the nursing programme ($p < 0.0001$) and self-efficacy about internship ($p < 0.0001$) were associated with self-esteem. The dropout rate was 21.5%. Self-esteem level ($p = 0.039$) and academic performance ($p < 0.0001$) were associated with dropout. **CONCLUSION:** While nursing

student self-esteem is often described as low, we know little about its baseline before entering the nursing programme and the factors that influence it. The dropout rate among first-year nursing students is high, but self-esteem is rarely explored as a possible explanation. We found that students had medium, and potentially fragile, self-esteem when starting their nursing education, and that self-esteem was associated with dropout. IMPACT: Given that association and the impact of self-esteem on well-being and professional behaviour, educational institutions should foster self-esteem both generally and in students with anxiety or low self-efficacy. Future research should explore nursing student self-esteem using a longitudinal mixed methods approach. Society should value nurses and nursing students.

Das Gecim, G. Y. et Esin, M. N. (2021). "A self-management programme for work ability and quality of life in nurses aged 45 years and over: A randomized controlled trial." *Int J Nurs Pract* **27**(6) : e12963

Background Nurses are exposed to declining work ability and quality of life because of biological and environmental factors. Aim The aim of the study was to investigate the effect of a self-management programme based on an attitude-social influence-self-efficacy model on work ability and quality of life for nurses aged 45 years and over. Methods A parallel group trial design was used. Nurses who fitted the eligibility criteria of being aged 45 years and over were randomly assigned to an intervention or a control group. Data were collected between October 2017 and June 2018 at the hospital. The participants were blinded to group allocation. The primary outcome in the study was the impact of age on work ability. Results Each group consisted of 30 nurses. There were no dropouts, so all subjects were analysed. Compared with the baseline, the intervention group's work ability was higher. There was a statistically significant difference between the groups in terms of the amount of changes in Work Ability Index scores at the third month compared the baseline. Conclusion The self-management programme was effective in increasing the nurses' work ability and healthy lifestyle behaviours affecting their quality of life.

Delamaire, M. L. (2021). "La pratique avancée infirmière en réanimation : pays de l'OCDE et perspectives en France." *Gestions Hospitalières*(603): 118-121.

Avec la crise sanitaire, le service réanimation a été au centre de l'actualité. Le manque de personnel médical et de lit en raison de besoins hors normes a été mis en exergue. Beaucoup de services ont dû faire face à un grand afflux de patients. Dans ce cadre exceptionnel, la question de la pratique avancée infirmière en réanimation est très opportune. Cette fonction existe-t-elle en dehors de nos frontières et, si oui, a-t-elle fait l'objet d'évaluation ? Quels sont ses intérêts et ses risques éventuels ? L'auteure de cet article répond à toutes ces questions à travers une revue de littérature réalisée pendant l'été 2020.

Delgado, C. et Roche, M. (2021). "Mental health nurses' psychological well-being, mental distress, and workplace resilience: A cross-sectional survey." *J Psychiatr Ment Health Nurs* **30**(5): 1234-1247.

Mental health nurses (MHNs) frequently face emotional adversity and stressors at work that can negatively impact their psychological well-being and result in mental distress. This can affect their capacity for therapeutic work, professional relationships, and overall work performance. In the context of work, resilience is a dynamic process of positive adaptation to adversity that can lead to psychological well-being and increased work performance. There is limited knowledge, however, on MHNs' psychological well-being and resilience from an Australian perspective. This study aimed to investigate the levels of, and relationships between, psychological well-being, mental distress, and workplace resilience in Australian MHNs. A cross-sectional online survey using Ryff's Scales of Psychological Well-being (PWS) 18, Depression, Anxiety and Stress (DASS) 21, and Resilience at Work measures was completed by registered nurses (n = 482) working in a mental health setting or role. Mean scores were 85.38 for psychological well-being and 70.27 for workplace resilience, with more than half reporting levels above the mean. However, some participants scored in the severe to extremely severe categories for depression (7.8%), anxiety (8.7%) or stress (7.3%). Psychological well-being had strong positive and negative associations, respectively, with workplace resilience ($r = 0.571$,

$P < 0.01$) and depression ($r = -0.563$, $P < 0.01$). Having a postgraduate specialist qualification was positively associated with psychological well-being. Postgraduate specialty education may be a key protective factor that can increase MHNs' psychological well-being. Strengthening workplace resilience is an important strategy for organizations to implement to support MHNs' psychological well-being and reduce the risk of mental distress.

Eyland, I. (2021). "Les savoirs infirmiers liés au care exprimés dans les gestes professionnels." Recherche en soins infirmiers **144**(1): 105-115.
<https://www.cairn.info/revue-recherche-en-soins-infirmiers-2021-1-page-105.htm>

Introduction : historiquement, il est admis que les femmes soignantes ont toujours eu des fonctions liées au care. Il s'exprime selon des modalités différentes dans des gestes professionnels. Contexte : dans un contexte où l'activité des infirmières est davantage centrée sur les actes techniques et sur le cure, nous pouvons nous interroger sur la place des savoirs professionnels liés au care dans les soins. Objectif : cet article a pour objet de présenter des résultats d'une recherche qui s'intéresse à l'identification de gestes professionnels liés au care dans l'activité des infirmiers en situations de soins et de leurs liens avec les savoirs infirmiers. Méthode : la recherche a été menée dans le cadre de la clinique de l'activité, en utilisant l'auto confrontation simple et l'instruction au sosie. Les données ont été recueillies auprès d'infirmiers libéraux par des enregistrements et des prises de notes, puis analysées dans le but de les catégoriser en utilisant les cadres de références de l'analyse lexicale, des topiques énonciatives et de la typologie des savoirs infirmiers. Résultats : quatre types de gestes professionnels liés au care ont été identifiés : des gestes d'ambiance, des gestes de sollicitude, des gestes d'évaluation et des gestes de régulation. Les résultats ont permis de schématiser un outil d'analyse de ces gestes professionnels liés au care. Discussion : les gestes professionnels liés au care existent et sont identifiables. L'analyse des résultats confirme que l'expérience transforme les savoirs de natures différentes en savoirs pratiques. Conclusion : la confrontation entre exercice professionnel et les différents types de savoirs acquis permet la construction des savoirs professionnels.

Galanis, P., Vraka, I., Fragkou, D., et al. (2021). "Nurses' burnout and associated risk factors during the COVID-19 pandemic: A systematic review and meta-analysis." J Adv Nurs **77**(8): 3286-3302.

AIMS: To examine the nurses' burnout and associated risk factors during the COVID-19 pandemic. DESIGN: We followed the Cochrane criteria and the Preferred Reporting Items for Systematic Reviews and Meta-Analysis guidelines for this systematic review and meta-analysis. DATA SOURCES: PubMed, Scopus, ProQuest, Cochrane COVID-19 registry, CINAHL and pre-print services (medRxiv and PsyArXiv) were searched from January 1 to November 15, 2020 and we removed duplicates. REVIEW METHODS: We applied a random effect model to estimate pooled effects since the heterogeneity between results was very high. RESULTS: Sixteen studies, including 18,935 nurses met the inclusion criteria. The overall prevalence of emotional exhaustion was 34.1%, of depersonalization was 12.6% and of lack of personal accomplishment was 15.2%. The main risk factors that increased nurses' burnout were the following: younger age, decreased social support, low family and colleagues readiness to cope with COVID-19 outbreak, increased perceived threat of Covid-19, longer working time in quarantine areas, working in a high-risk environment, working in hospitals with inadequate and insufficient material and human resources, increased workload and lower level of specialized training regarding COVID-19. CONCLUSION: Nurses experience high levels of burnout during the COVID-19 pandemic, while several sociodemographic, social and occupational factors affect this burnout. IMPACT: We found that burnout among nurses is a crucial issue during the COVID-19 pandemic. There is an urgent need to prepare nurses to cope better with COVID-19 pandemic. Identification of risk factors for burnout could be a significant weapon giving nurses and health care systems the ability to response in a better way against the following COVID-19 waves in the near future.

Gualano, M. R., Sinigaglia, T., Lo Moro, G., et al. (2021). "The Burden of Burnout among Healthcare Professionals of Intensive Care Units and Emergency Departments during the COVID-19 Pandemic: A Systematic Review." Int J Environ Res Public Health **18**(15).

The primary aim was to evaluate the burnout prevalence among healthcare workers (HCWs) in intensive care units (ICUs) and emergency departments (EDs) during the COVID-19 pandemic. The secondary aim was to identify factors associated with burnout in this population. A systematic review was conducted following PRISMA guidelines by searching PubMed, Embase, PsychINFO, and Scopus from 1 January to 24 November 2020. Studies with information about burnout prevalence/level during the pandemic regarding ICU/ED HCWs were eligible. A total of 927 records were identified. The selection resulted in 11 studies. Most studies were conducted in April/May 2020. Samples ranged from 15 to 12,596 participants. The prevalence of overall burnout ranged from 49.3% to 58%. Nurses seemed to be at higher risk. Both socio-demographic and work-related features were associated with burnout. Many pandemic-related variables were associated with burnout, e.g., shortage in resources, worry regarding COVID-19, and stigma. This review highlighted a substantial burnout prevalence among ICU/ED HCWs. However, this population has presented a high burnout prevalence for a long time, and there is not sufficient evidence to understand if such prevalence is currently increased. It also outlined modifiable factors and the need to improve emergency preparedness both from an individual and structural level.

Halperin, O. et Eldar Regev, O. (2021). "Predicting academic success based on perseverance and passion for long-term goals (grit) among nursing students: Is there a cultural context?" *Nurse Educ Today* **100**: 104844.

BACKGROUND: The grit concept encompasses passion, i.e., the degree in which people maintain their passion for the same goal over long periods of time, and perseverance, i.e., the degree to which people make an effort to achieve the same goal over time. Studies show that people with higher grit have better outcomes in a variety of areas, including academic achievements. **OBJECTIVES:** To examine whether grit may be used as an admission tool for predicting academic success and non-dropout among nursing students at a college, and whether it can be identified in a cultural context (Jewish and Arab students). **DESIGN:** A descriptive, exploratory study was employed. **SETTING:** The study was implemented in the Department of Nursing at a college in Israel. **PARTICIPANTS:** 237 nursing students in their second, third, or fourth year of studies participated in the study. **RESULTS:** Grit meant that on average, scores out of 5 were quite high (passion = 3.56; perseverance = 4.00), with students rating themselves as being highly passionate about their studies and having high academic perseverance. Out of 100, the average college grade and clinical grade were relatively high as well (M = 84.66, range 68-95; M = 91.05, range 75-100 respectively), and were positively and significantly correlated. Significant weak positive correlations were found between the average college grade, passion scores, and total grit. No relationships were found for the clinical grade. The average college grade was found to be higher among Jewish students than among Arab ones, and higher among students who were born in Israel. Higher passion and higher total grit scores were predictive of a higher average college grade. **CONCLUSIONS:** Passion and perseverance are qualities that may be associated with health professionals. Findings show cultural differences regarding grit. Therefore, larger studies are encouraged, in order to investigate such differences. Whether grit should be included in student assessment models remains to be determined.

Isaac-Sibille, C. (2021). L'organisation des professions de santé : quelle vision dans dix ans et comment y parvenir ? Paris Assemblée Nationale

https://www.assemblee-nationale.fr/dyn/15/rapports/cion-soc/l15b4319_rapport-information.pdf

La présente mission d'information émane d'une profonde volonté, partagée par l'ensemble des acteurs, de faire évoluer l'organisation du système de santé français, avec l'objectif d'améliorer l'accès aux soins et d'enrichir les missions et les carrières des professionnels paramédicaux. Cette volonté est aussi partagée sur de nombreux bancs de l'Assemblée nationale mais peine à se concrétiser. Récemment, les réflexions se sont concentrées sur l'opportunité ou non de créer une profession de santé intermédiaire pour apporter une réponse aux tensions portant sur la démographie médicale et aux besoins croissants en personnels médicaux hospitaliers.

Jarden, R. J., Jarden, A., Weiland, T. J., et al. (2021). "New graduate nurse wellbeing, work wellbeing and mental health: A quantitative systematic review." *Int J Nurs Stud* **121**: 103997.

BACKGROUND: The contribution of work to positive mental health is increasingly apparent. Transition into the workplace causes a range of stressors for new graduate nurses who experience both psychological wellbeing and illbeing in their first year of practice. **OBJECTIVE:** To determine published prevalence, predictors, barriers and enablers of new graduate registered nurse wellbeing, work wellbeing and mental health. **DESIGN:** Systematic review of quantitative research. **DATA SOURCES:** Databases included Cumulative Index of Nursing and Allied Health Literature, Excerpta Medica database, Medical Literature Analysis and Retrieval System Online and Psychological Information. Quantitative and mixed-methods studies were considered for inclusion if published in English from 2009 to 2019 reporting primary data analysis including new graduate nurses' wellbeing, work wellbeing and mental health. **REVIEW METHODS:** Quantitative studies were systematically identified then screened and appraised against pre-determined inclusion criteria. Analysis was conducted by grouping according to analytical methods and results reported as a narrative synthesis. **RESULTS:** Thirty-four studies were included. The quality of the evidence was variable with just a quarter of the studies being assessed as meeting the quality criteria on all nine measures. For the new graduate nurses prevalence of wellbeing, levels of resilience, optimism, and hope were found to be high. For work wellbeing, most reported higher job satisfaction by 12-months. For work illbeing, levels of burnout were moderately high, predominantly in terms of emotional exhaustion, and stress was initially high, particularly in terms of workload, but decreased over time. For the predictors, job satisfaction was positively predicted by structural empowerment and career satisfaction, and negatively predicted by co-worker incivility, supervisor incivility and emotional exhaustion. For work illbeing, stress was a positive predictor for intent to leave. Stress reductions were associated with momentary levels of high task mastery, social acceptance and role clarity. **CONCLUSIONS:** For new graduate nurses, levels of emotional exhaustion, workload and stress were moderately high to high initially, decreasing over time as the graduate nurses' job satisfaction increased. Most studies focused on the nurses' intent to resign or stay and both psychological capital and work engagement positively predicted intent to stay whereas work stress positively predicted intent to resign. Resilience and group cohesion moderated the negative effects of some variables, thus may be potential enablers of work wellbeing. The standards of research reporting or design were generally sub-optimal according to quality indicators. Systematic review registration number: (CRD42020148812).

Jun, J., Ojemeni, M. M., Kalamani, R., et al. (2021). "Relationship between nurse burnout, patient and organizational outcomes: Systematic review." *Int J Nurs Stud* **119**: 103933.

BACKGROUND: Burnout, characterized by emotional exhaustion, depersonalization, and decreased personal accomplishments, poses a significant burden on individual nurses' health and mental wellbeing. As growing evidence highlights the adverse consequences of burnout for clinicians, patients, and organizations, it is imperative to examine nurse burnout in the healthcare system. **OBJECTIVE:** The purpose of this review is to systematically and critically appraise the current literature to examine the associations between nurse burnout and patient and hospital organizational outcomes. **DESIGN AND DATA SOURCES:** A systematic review following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses was conducted. PubMed, CINAHL, PsychInfo, Scopus, and Embase were the search engines used. The inclusion criteria were any primary studies examining burnout among nurses working in hospitals as an independent variable, in peer-reviewed journals, and written in English. The search was performed from October 2018 to January 2019 and updated in January and October 2020. **RESULTS:** A total of 20 studies were included in the review. The organizational-related outcomes associated with nurse burnout were (1) patient safety, (2) quality of care, (3) nurses' organizational commitment, (4) nurse productivity, and (5) patient satisfaction. For these themes, nurse burnout was consistently inversely associated with outcome measures. **CONCLUSIONS:** Nurse burnout is an occupational hazard affecting nurses, patients, organizations, and society at large. Nurse burnout is associated with worsening safety and quality of care, decreased patient satisfaction, and nurses' organizational commitment and productivity. Traditionally, burnout is viewed as an individual issue. However, reframing burnout as an organizational and collective phenomenon affords the broader perspective necessary to address nurse burnout. Tweetable abstract: Not only nurse burnout associated w/ worsening safety & quality of care, but also w/ nurses'

organizational commitment and productivity. Reframing burnout, as an organizational & collective phenomenon is necessary.

Kameg, B. N., Fradkin, D., Lee, H., et al. (2021). "Mental wellness among psychiatric-mental health nurses during the COVID-19 pandemic." Rev Gaucha Enferm **35**(4): 401-406.

Psychiatric nursing providers and their unique challenges in the face of the COVID-19 pandemic are not well-represented in the literature. Therefore, this study sought to describe mental well-being of psychiatric nurses, and sought to elucidate factors related to mental wellness during the COVID-19 pandemic. This study utilized cross-sectional survey methodology to evaluate burnout, mental wellness, COVID-related anxiety, professional fulfillment, depressive symptoms, and anxiety symptoms among psychiatric nurses. There was a total of 151 respondents. A linear regression model was employed to identify predictors of mental wellness. The final regression model included the following predictors: depressive symptoms, burnout, professional fulfillment, and educational status. These predictors together accounted for 73% of the variance for the outcome variable of mental well-being.

Lefebvre des Noëttes, V., Marc, B., Marc, G., et al. (2021). Soigner les soignants, MA Editions-ESKA

Cet ouvrage s'attache à répondre au constat que soigner est le plus beau des métiers, mais qu'il ne fait plus rêver. Alors que les impératifs actuels de rentabilité bouleversent la relation humaine au cœur du soin, les soignants doivent s'adapter aux évolutions sans renier leur éthique professionnelle, sans se laisser au fil de leur carrière et sans s'épuiser une fois devenus sénior dans leur pratique. Cette dichotomie paradoxale suscite mal-être, tensions, dysfonctionnements, perte de sens, conflits de valeurs, épuisement professionnel, souffrances, entraînant ainsi une spirale négative, voire fatale. Cet ouvrage est un constat réunissant toutes les professions du soin, personnels médicaux et non-médicaux, et une proposition de solutions pour remédier à cette souffrance vécue, en y intégrant les impacts de la crise sanitaire majeure de la Covid-19. Cet ouvrage s'adresse à tous les soignants, à celles et ceux qui les forment initialement ou en formation continue, aux personnels d'encadrement et de direction, à toutes leurs instances, comme au grand public qui veut comprendre les soignants auxquels ils ont offert leurs applaudissements quotidiens. (4ème couv.)

Lemoine, D., Chabanel, V., O'Neil, M., et al. (2021). Comment rester infirmière ? Entretiens avec des professionnels sur leur métier et leurs motivations, Seli Arslan

Comment rester infirmière ? Nombre de professionnels infirmiers se posent cette question. La crise sanitaire a mis en lumière leurs difficultés, beaucoup d'entre eux ayant fait part de leur souhait de quitter la profession. Elle a aussi souligné leur rôle de maillon essentiel des soins aux yeux de la population. Les entretiens réunis dans cet ouvrage permettent de comprendre leurs ressentis, mais également de déterminer les possibilités de rester en exercice, la façon de maintenir les motivations, alors que les idéaux se heurtent à la réalité des conditions de travail. Les femmes et les hommes qui prennent la parole dans ce livre témoignent de leur parcours professionnel. Ils reviennent sur les raisons qui leur ont fait choisir les études infirmières, leur vécu de la formation, des stages, leurs représentations de l'infirmière. Ils répondent à des questions sur les valeurs, la culture infirmière, l'engagement, la reconnaissance, le caractère difficile de leur métier. Ils expriment leur opinion sur les départs des infirmières, mais aussi sur les facteurs qui permettent de rester. Ils indiquent quelles sont leurs propres ressources pour se sentir bien au travail, ce qui leur donne l'élan pour aller travailler. Ils proposent des conseils aux jeunes infirmières pour se préserver, durer dans la profession. Ils livrent aussi des perspectives concernant l'avenir de leur profession. À travers leurs paroles libres, qui ne voient pas les doutes ni les difficultés, c'est la richesse du métier qui se dessine.

Marufu, T. C., Collins, A., Vargas, L., et al. (2021). "Factors influencing retention among hospital nurses: systematic review." Br J Nurs **30**(5): 302-308.

BACKGROUND: Recruitment and retention of nursing staff is the biggest workforce challenge faced by healthcare institutions. Across the UK, there are currently around 50 000 nursing vacancies, and the number of people leaving the Nursing and Midwifery Council register is increasing. **OBJECTIVE:** This review comprehensively compiled an update on factors affecting retention among hospital nursing staff. **METHODS:** Five online databases; EMBASE, MEDLINE, SCOPUS, CINAHL and NICE Evidence were searched for relevant primary studies published until 31 December 2018 on retention among nurses in hospitals. **RESULTS:** Forty-seven studies met the inclusion criteria. Nine domains influencing staff turnover were found: nursing leadership and management, education and career advancement, organisational (work) environment, staffing levels, professional issues, support at work, personal influences, demographic influences, and financial remuneration. **CONCLUSION:** Identified turnover factors are long-standing. To mitigate the impact of these factors, evaluation of current workforce strategies should be high priority.

Nemati, R., Moradi, A., Marzban, M., et al. (2021). "The association between moral distress and mental health among nurses working at selected hospitals in Iran during the COVID-19 pandemic." *Work* **70**(4): 1039-1046.

BACKGROUND: In the event of an epidemic outbreak, the mental health of medical staff, including nurses who serve on the frontlines of hospitals, can be affected; thus, the identification of factors affecting nurses' mental health is of importance. **OBJECTIVE:** This study aimed to examine the association between moral distress and the mental health of nurses working at four selected hospitals in Iran during the coronavirus disease 2019 (COVID-19) pandemic. **METHODS:** A cross-sectional questionnaire survey was conducted on 296 nurses working at the selected hospitals in Bushehr and Shiraz (south of Iran) at the time of the COVID-19 outbreak. The collected data were analyzed via logistic regression analysis. **RESULTS:** The mean scores for nurses' moral distress were low (54.31 ± 24.84). The results of this study indicated more symptoms of mental issues among nurses (73.60%). Moreover, a significant association was observed between mental health and moral distress. Among the examined demographic variables, only gender had a significant association with mental health ($p\text{-value} = 0.014$). **CONCLUSION:** The results of this study indicated that an increase in moral distress would lead to a significant increase in mental health issues of the examined nurses. Nurse managers and hospital policymakers should develop strategies to enhance nurses' level of mental health, as well as providing adequate emotional and family support for nurses. Considering the intensifying role of gender in this association, timely interventions are necessary to reduce the negative effects of workplace pressure/stress on female nurses.

Ramírez-Elvira, S., Romero-Béjar, J. L., Suleiman-Martos, N., et al. (2021). "Prevalence, Risk Factors and Burnout Levels in Intensive Care Unit Nurses: A Systematic Review and Meta-Analysis." *Int J Environ Res Public Health* **18**(21).

Nursing is considered to be an at-risk profession of burnout due to daily exposure to difficult situations such as death and pain care. In addition, some units such as the intensive care unit (ICU), can be stressful due to high levels of morbidity and mortality and ethical dilemmas. Burnout causes a deterioration in quality of care, increasing the risk of mortality in patients due to poor performance and errors in the healthcare environment. The aim of this study was to analyse the levels, prevalence and related factors of burnout in ICU nurses. A systematic review and meta-analysis were carried out in the Medline, Scopus and CINAHL databases. Fifteen articles were found for the systematic review and four for the meta-analysis. With a sample of $n = 1986$ nurses, the meta-analytic estimate prevalence for high emotional exhaustion was 31% (95% CI, 8-59%), for high depersonalization was 18% (95% CI, 8-30%), and for low personal accomplishment was 46% (95% CI, 20-74%). Within the dimensions of burnout, emotional exhaustion had a significant relationship with depression and personality factors. Both sociodemographic factors (being younger, single marital status, and having less professional experience in ICU) and working conditions (workload and working longer hours) influence the risk of burnout syndrome.

Rioux-Dubois, A. et Perron, A. (2021). "Intégration des infirmières praticiennes en soins de santé primaires : repenser la négociation de dynamiques complexes." *Recherche en soins infirmiers* **145**(2): 38-52.

<https://www.cairn.info/revue-recherche-en-soins-infirmiers-2021-2-page-38.htm>

L'intégration des infirmières praticiennes en soins de santé primaires est hautement complexe mais peu étudiée au regard de changements socioprofessionnels plus larges dans le système de santé. Objectif : le but de cette étude était d'examiner l'intégration et la négociation du rôle des infirmières praticiennes en contexte interprofessionnel dans divers modèles de soins de santé primaires. Méthode : une ethnographie multisite critique, combinant la théorie de l'acteur-réseau et les concepts foucauldien de discours et pouvoir, a été menée au sein de trois différents modèles de soins dans lesquels des entrevues semi-dirigées (n=23 infirmières praticiennes), de l'observation directe et de l'analyse documentaire ont été réalisées. Résultats : les finalités organisationnelles, les normes de pratique, le droit des infirmières praticiennes à l'autodétermination, les dynamiques de collaboration avec les médecins, ainsi que la prise en charge des patients ont été identifiés comme des facteurs d'intégration produisant davantage d'instabilités, de négociations et de contrecoups professionnels, identitaires et moraux chez ces professionnelles. Discussion : ces résultats remettent en question la perception répandue d'un manque de clarté du rôle des infirmières praticiennes et permettent une compréhension renouvelée de leur intégration en soins de santé primaires.

Sainsaulieu, I. (2021). "Mobilisations soignantes par gros temps : quelle prise de risque organisationnelle ?" *Revue Française Des Affaires Sociales*(4): 97-109.

<https://www.cairn.info/revue-francaise-des-affaires-sociales-2021-4-page-97.htm>

En France, la prise de risque des personnels soignants a été saluée face à la pandémie. La mobilisation soignante n'est pas, en effet, un état naturel, inhérent à une activité professionnelle, comme ont pu le penser les (rares) personnes qui refusaient de les applaudir au balcon (« Ils ne font que leur boulot ! »). Se mobiliser contre la pandémie, c'est surtout prendre le risque d'un état de fatigue important. D'ailleurs, à l'hôpital, les infirmières étaient volontaires pour aller travailler dans les « services covidés ». Face à la seconde vague fin 2020, les soignants rencontrés accusaient le coup. À la troisième vague, au printemps 2021, les absences pour maladie ont augmenté, à l'exemple du CHU-Est de la France. Quant au risque de contagion, dans le même établissement, un millier de soignants au total ont contracté le virus, heureusement sans décès qui lui soient imputables. Si l'on y ajoute les conditions de travail ordinaire (le rythme du travail, le manque de lits et de personnels), on peut conclure à la prise de risque globale et supplémentaire d'un personnel hospitalier déjà réputé dur à l'épreuve. Quelle prise de risque organisationnelle, côté hiérarchie ? Alors que les personnels étaient mobilisés dans les services covidés, l'organisation du travail a-t-elle su prendre en compte ce nouvel apport, bousculer un peu la césure hiérarchique et inclure les personnels dans la prise de décision ?

Silva, G. O., Aredes, N. D. et Galdino, H. (2021). "Academic performance, adaptation and mental health of nursing students: A cross-sectional study." *Nurse Educ Pract* **55**.

Aim: To evaluate the institutional indicators of academic success, performance and failure and to identify the factors that influence the performance, academic adaptation and mental health of nursing students. Design: Descriptive, cross-sectional study. Methods: Data collection was performed between April 2018 and January 2020, focusing on academic data of nursing students (n = 348) and answers to a questionnaire with active students of the course with at least two years since admission (n = 88). Results: Academic data indicates negative trends on academic failure and dropouts. Mean academic performance was 7.56 out of 10 and ALEQ-r results showed high academic adaptation in all dimensions, except in the personal dimension of scale. The prevalence of depressive symptoms reported was 60.2% (95%CI: 49.8-70.1%) and presented as predictors of this condition both academic performance and adaptation. Conclusions: There was found a trend in academic failure and dropouts among nursing students, as well as a relevant prevalence of depressive symptoms despite good average of academic adaptation and academic performance.

Yoder, C. M., Cantrell, M. A. et Hinkle, J. L. (2021). "Primary school classmate characteristics and school nursing predicting graduation from high school." *Public Health Nursing* **38**(5): 760-769.

Objectives To examine how primary school context variables, such as total students in the school, students with disability, and aspects of school nurse workload, predict later educational outcomes of high school attendance, being on-track to graduate, and graduation. **Methods** This secondary analysis of 3,782 student records from 2008 to 2018 was conducted using United States public-school district data. **Results** Classmate attendance in fifth-grade predicted being on-track to graduate (adjusted odds ratio [AOR] = 1.42 [95% confidence interval [CI] = 1.27, 1.60]) and graduation (AOR = 1.14 [95% CI = 1.03, 1.26]). School nurse workload aspects affected being on-track to graduate: (low-income students per school nurse [AOR = 0.77 [95% CI = 0.70, 0.85]; total students per school nurse [AOR = 1.3 [1.18, 1.44]) and graduation (low-income students per school nurse [AOR = 0.82 [95% CI = 0.75, 0.90]; total students per school nurse [AOR = 1.4 [1.26, 1.57]). **Conclusion** Characteristics of the school population such as classmate attendance and students with limited resources per school nurse are areas for future interventions as they affect student educational outcomes and lifelong health.

(2020). "Arrêts maladie chez les hospitaliers : impact fort des conditions de travail." *Revue Prescrire* **40**(444): 786-787.

Selon des enquêtes menées en France au cours des années 2010, le nombre de jours d'arrêt maladie observé chez les professionnels hospitaliers varie peu entre le secteur public et le secteur privé. Les raisons de ces arrêts maladie sont surtout liés aux conditions de travail, ainsi qu'à l'âge des salariés. Pénibilité des tâches et mécontentement par rapport à l'évolution de leur métier semblent être les principaux déterminants de l'état de santé des personnels hospitaliers, surtout infirmiers et aides-soignants.

Alharbi, J., Jackson, D. et Usher, K. (2020). "Personal characteristics, coping strategies, and resilience impact on compassion fatigue in critical care nurses: A cross-sectional study." *Nursing & Health Sciences* **22**(1): 20-27.

Compassion fatigue is known to impact the well-being of nurses and patient safety outcomes. Currently, there is limited academic understanding of the role of demographic factors in contributing to compassion fatigue in critical care nurses. The aim of this study was to examine the relationship between nurse demographic characteristics and the development of compassion fatigue, as indicated by level of burnout and compassion satisfaction in critical care nurses in Saudi Arabia. The cross-sectional study design included administering three surveys to critical care nurses (n = 321) in four Saudi public hospitals to examine the nurse demographic variables in relation to compassion fatigue, the compassion fatigue coping strategies of nurses, and nurse resilience. The results show both demographic and workplace structural elements, such as length of work shift, education level, and nationality, were all significant factors in resilience to compassion fatigue among Saudi critical care nurses, whereas factors of age and sex were not significant. This study concludes that the demographic characteristics of critical care nurses enable the identification of levels of compassion fatigue and compassion satisfaction, and their resilience to the effects of compassion fatigue.

Alshawush, K. A., Hallett, N. et Bradbury-Jones, C. (2020). "Impact of transition programmes for students and new graduate nurses on workplace bullying, violence, stress and resilience: a scoping review protocol." *BMJ Open* **10**(10): e038893.

INTRODUCTION: The shortage of nurses is projected to grow, and the number of new graduate nurses (NGNs) who are predicted to replace expert nurses has increased. Meanwhile, those NGNs leaving their job within the first year, give various reasons for leaving, including workplace bullying and violence. In response, some hospitals and universities have developed nurse transition programmes such as nurse residency programmes and nurse internship programmes to attract NGNs and to assist in their changing status from education to practice. Although these programmes have been successful in decreasing the turnover rate for new nurses and are cost-effective, their impact on workplace bullying and violence has not been systematically reviewed and is yet to be determined. A scoping review will be conducted to address this gap. The aim is to identify current knowledge regarding the content of transition programmes and their impact in supporting NGNs dealing with workplace violence, bullying and stress. **METHODS AND ANALYSIS:** Arksey and O'Malley's scoping framework and

the Joanna Briggs Institute scoping review guidance will guide the methodology process of the review. Published studies, with no date limit, will be identified through the electronic databases (CINAHL, Scopus, MEDLINE, Web of Science, ASSIA, PsycINFO, Embase, PROSPERO and ProQuest Dissertation) and reference lists. Primary key terms will be 'novice nurse', 'new graduate nurses' and 'transition programmes'. Two reviewers, guided by standardised procedures, will perform the study selection process independently. Data from the selected studies will be extracted using a data extraction form. Thematic analysis (for qualitative papers) and descriptive summary of the results (for quantitative papers) will be performed. ETHICS AND DISSEMINATION: Ethical approval is not required for this review. Findings will be used to inform future study designs to evaluate the transition programmes and disseminated via peer-reviewed journals and conferences.

ANEMF (2020). Rapport santé mentale 2020. Paris ANEMF

<https://www.anemf.org/wp-content/uploads/2020/06/enquetecovid.pdf>

L'Association Nationale des Étudiants en Médecine de France alerte sur la mentale des étudiants en santé. Depuis plusieurs années, les fédérations nationales des étudiants en santé mettent en garde sur le mal-être étudiant au sein de leur filière. Leurs enquêtes rapportent des chiffres alarmants concernant la précarité étudiante, le stress, la dépression... Améliorer la santé et le bien-être des étudiants en santé est une action nécessaire dont les bénéfices s'étendront aux futurs patients et participeront à la transformation de notre système de santé. Notre santé est aussi la vôtre, et celle-ci ne devrait pas avoir de prix. Ensemble, il est temps de réagir et de développer des actions concrètes comme proposées dans ce rapport.

Bakker, E. J. M., Kox, J., Boot, C. R. L., et al. (2020). "Improving mental health of student and novice nurses to prevent dropout: A systematic review." *J Adv Nurs* **76**(10): 2494-2509.

AIMS: To provide: (a) an overview of interventions aimed at improving mental health of student or novice nurses; and (b) an evaluation of their effectiveness on dropout-related outcomes. DESIGN: Systematic review. DATA SOURCES: Research papers published between January 1971-February 2019 were identified from the following databases: Embase, Medline, PsycInfo, CINAHL, ERIC, the Cochrane Library, Web of Science, and Google Scholar. REVIEW METHODS: We followed the procedures recommended by the Editorial Board of the Cochrane Collaboration Back Review Group. We included peer-reviewed articles with a quantitative research design, examining interventions aimed at improving mental health of student and novice nurses and their effect on dropout-related outcomes. The large variation in studies prohibited statistical pooling and a synthesis without meta-analysis of studies was performed. RESULTS: We identified 21 studies with three areas of focus: managing stress or stressors (N = 4); facilitating the transition to nursing practice (N = 14); and a combined approach (N = 3). Five studies showed a statistically significant effect on dropout-related outcomes. The overall risk of bias was high. CONCLUSION: A wide range of interventions are available, but the evidence for their effectiveness is limited. There is a need for high-quality studies in this field, preferably with a randomized controlled design.

Bouguerra, C., Najar, N., Ghalgaoui, A., et al. (2020). "The impact of nurses' quality of work life on quality of care." *Risques & Qualité* **XVII** (2) : 85-89.

Les infirmières sont souvent confrontées à de multiples contraintes lorsqu'elles traitent avec des patients. Ces contraintes peuvent influencer la qualité de la vie professionnelle qui à son tour influera sur la qualité des soins. Les objectifs de cette étude : décrire la perception de la qualité de vie au travail et de la qualité des soins, rechercher les facteurs qui influencent la qualité de vie au travail et la qualité des soins, étudier la relation entre la qualité de vie au travail et la qualité des soins. Il s'agit d'une étude analytique-observationnelle réalisée en 2018 sur 266 infirmières d'un hôpital universitaire tunisien.

Bourgeon, D. (2020). "La part maudite du soin." *Soins & Management* **Hors série** :32-34.

Le burn-out ou syndrome d'épuisement professionnel est une notion qui a fait l'objet d'études variées. Si en 15 ans, plus de 2500 articles ont exploré ce phénomène, les deux-cinquièmes concernaient les professions d'aide et de santé alors qu'un tiers interrogeait le milieu des enseignants et des éducateurs. Autrement dit, ce syndrome apparaîtrait singulièrement dans les métiers où la réussite des actions relève fondamentalement des capacités relationnelles des professionnels.

Chamanga, E., Dyson, J., Loke, J., et al. (2020). "Factors influencing the recruitment and retention of registered nurses in adult community nursing services: an integrative literature review." Primary Health Care Research and Development **21**. :e31

Background: Adult community nursing services are evolving around the world in response to government policies and changing patient demographics. Amidst these changes, recruitment and retention of community nursing staff are proving a challenge. An integrative literature review has identified multiple factors that influence nurse retention in adult community nursing with sparse information on recruitment factors. Although factors impacting retention of community nurses have been identified, their generalisability around the world is a challenge as they are context and co-dependent. Indicating the need for this area of study to be explored at a local level, as the same factors present with different findings globally. Aim: To establish factors influencing recruitment and retention of registered nurses in adult community nursing services. Design: Integrative literature review. Data sources: Four electronic databases were searched in August 2019 from January 2008 to December 2018: CINAHL Complete, Web of Science, MEDLINE and PROQUEST. Both qualitative and quantitative studies focusing on factors influencing community nursing recruitment and retention were included. Review methods: An integrative literature review methodology by Whittemore and Knafl (The integrative review: updated methodology. *Journal of Advanced Nursing* 52, 546-553) was followed, supported by Cochrane guidelines on data synthesis and analysis using a narrative synthesis method. The Center for Evidence-Based Management (CEBMA) critical appraisal tools were used for study quality assessment. Results: Ten papers met the study inclusion criteria. Data synthesis and analysis revealed individual and organisational factors influencing the retention of community nurses with the following three dominant themes: (1) work pressure, (2) working conditions and (3) lack of appreciation by managers. Conclusion: The review identified context-dependent factors that influence adult community nurses' retention with limited generalisability. There is a lack of data on factors influencing recruitment into adult community nursing; further research is needed to explore factors affiliated to community nursing recruitment.

Collard, S. S., Scammell, J. et Tee, S. (2020). "Closing the gap on nurse retention: A scoping review of implications for undergraduate education." Nurse Educ Today **84**: 104253.

OBJECTIVES: Newly qualified nurses leave the profession at a higher rate than any other year of experience. Undergraduate education influences nurse retention following qualification. However, it is unclear if the factors associated with intent to leave are included within programmes to aid retention once qualified. A scoping review was conducted to explore the literature within nursing as well as social work undergraduate education to obtain viewpoints from an allied profession with similar retention barriers. DESIGN AND DATA SOURCES: Following PRISMA extension guidelines for scoping review, the research question used to explore the literature was: What is the impact of undergraduate nurse and social work education on retention when newly qualified? Databases searched were BNI, CINAHL complete, Science Direct, PsycINFO, Medline Complete, Academic Search Complete and ERIC. REVIEW METHOD: One author undertook a comprehensive electronic and hand-search of relevant research articles. These were then discussed with two authors for inclusion within the review and data extracted for thematic analysis. RESULTS: Limited through search inclusion and quality of research, ten research papers met the criteria for this review. Main themes found were resilience and commitment, perceived knowledge and confidence, preparation for transition and expectation of supervision. CONCLUSION: The literature presents the need to strengthen resilience-building within undergraduate education in the transition to newly qualified practitioner, support to cope with the emotional and physical impact of professional practice as well as developing confidence in one's skills, guidance for

career progression, promotion of authentic leadership in work-place mentors and commitment of both the University and health or social organisation to support staff to be healthy and feel valued.

Covell, C. L., Sands, S. R., Ingraham, K., et al. (2020). "Mapping the peer-reviewed literature on accommodating nurses' return to work after leaves of absence for mental health issues: a scoping review." *Hum Resour Health* **18**(1): 36.

BACKGROUND: The complexity of nursing practice increases the risk of nurses suffering from mental health issues, such as substance use disorders, anxiety, burnout, depression, and posttraumatic stress disorder (PTSD). These mental health issues can potentially lead to nurses taking leaves of absence and may require accommodations for their return to work. The purpose of this review was to map key themes in the peer-reviewed literature about accommodations for nurses' return to work following leaves of absence for mental health issues. **METHODS:** A six-step methodological framework for scoping reviews was used to summarize the amount, types, sources, and distribution of the literature. The academic literature was searched through nine electronic databases. Electronic charts were used to extract code and collate the data. Findings were derived inductively and summarized thematically and numerically. **RESULTS:** Academic literature is scarce regarding interventions for nurses' return to work following leaves of absence for mental health issues, and most focused on substance use concerns. Search of the peer-reviewed literature yielded only six records. The records were primarily quantitative studies ($n = 4$, 68%), published between 1997 and 2018, and originated in the United States ($n = 6$, 100%). The qualitative thematic findings addressed three major themes: alternative to discipline programs (ADPs), peer support, and return to work policies, procedures, and practices. **CONCLUSIONS:** While the literature supports alternative to discipline programs as a primary accommodation supporting return to work of nurses, more on the effectiveness of such programs is required. Empirical evidence is necessary to develop, maintain, and refine much needed return to work accommodations for nurses after leaves of absence for mental health issues.

Dall'Ora, C., Ball, J., Reinius, M., et al. (2020). "Burnout in nursing: a theoretical review." *Hum Resour Health* **18**: 1-17.

Workforce studies often identify burnout as a nursing 'outcome'. Yet, burnout itself—what constitutes it, what factors contribute to its development, and what the wider consequences are for individuals, organisations, or their patients—is rarely made explicit. We aimed to provide a comprehensive summary of research that examines theorised relationships between burnout and other variables, in order to determine what is known (and not known) about the causes and consequences of burnout in nursing, and how this relates to theories of burnout.

Dutheil, F., Aubert, C., Pereira, B., et al. (2020). "Suicide des médecins et des professionnels de santé : Revue systématisée de la littérature et méta-analyse." *Archives des Maladies Professionnelles et de l'Environnement* **81**(5): 478.

<https://doi.org/10.1016/j.admp.2020.03.157>

Introduction Nous avons cherché à réaliser une revue systématisée de la littérature et une méta-analyse sur le risque de suicide chez les professionnels de santé. **Méthode** Les recherches ont été effectuées dans les bases de données PubMed, Cochrane Library, Science Direct et Embase jusqu'en avril 2019 avec les mots-clés suivants: suicide* AND (« health-care worker* » OR physician* OR nurse*). Quand il était possible, nous avons stratifié les Résultats par sexe, zones géographiques, périodes et spécialités. **Résultats** Un total de 61 articles ont été inclus. Le SMR global des suicides était 1,44 (95CI 1,16, 1,72) avec une hétérogénéité importante ($I^2=94\%$, $p<0,001$). Les femmes étaient à risque plus élevé (SMR=1,90; 95CI 1,49, 2,58; ES=0,67; 95CI 0,19, 1,14; $p<0,001$ comparé aux hommes). Les médecins des USA étaient à plus haut risque (ES=1,34; 95CI 1,28, 1,55; $p<0,001$ vs reste du monde). Le taux de suicide a diminué avec le temps, spécifiquement en Europe (ES=0,18; 95CI 0,00, 0,37; $p=0,044$). Certaines spécialités sembleraient plus à risque telles que les anesthésistes, les psychiatres et les médecins généralistes. Il y a 1 % (95CI 1,0, 2,0; $p<0,001$) de tentatives de suicide et 17 % (95CI 12, 21; $p<0,001$) d'idées suicidaires chez les médecins. Il n'y a pas assez de données sur les

autres professionnels pour réaliser des méta-analyses. Conclusion Les médecins sont à risque de suicide, spécialement les femmes. Le taux de suicide diminue avec le temps, spécifiquement en Europe. La prévalence élevée des médecins ayant fait une tentative de suicide ou de ceux ayant eu des idées suicidaires devraient servir à mettre en place des stratégies préventives. Enfin l'absence de donnée sur les autres professionnels de santé, suggère un besoin d'investigations.

Gakou, S. (2020). "Infirmière en pratique avancée dans le domaine de la psychiatrie. Retour d'expérience d'une faisant fonction IPA en équipe mobile de psychiatrie du sujet âgé : entretien." *L'Information Psychiatrique* **96**(7): 533-537.

<https://www.cairn.info/revue-l-information-psychiatrique-2020-7-page-533.htm>

Cet article rend compte de l'expérience d'une infirmière qui a débuté en 2002 son exercice en tant qu'infirmière au sein de l'établissement public de santé (EPS) Maison Blanche. Son choix s'est porté sur le domaine de la psychiatrie, discipline qui nécessite une véritable expertise clinique et organisationnelle ainsi que des qualités humaines telles que l'empathie, l'écoute, la bienveillance. Le métier d'infirmier en psychiatrie nécessite de prendre le temps individuellement avec chaque patient. Ce soignant aide l'individu présentant un trouble psychique à découvrir et cerner ses difficultés tout en lui proposant les moyens de les résoudre. La relation de soin créée prend en compte la personne dans sa globalité permettant ainsi de rétablir l'intégrité physique et psychique du patient. Cette pratique correspondait à mes attentes.

Gillet, N., Huyghebaert-Zouaghi, T., Réveillère, C., et al. (2020). "The effects of job demands on nurses' burnout and presenteeism through sleep quality and relaxation." *J Clin Nurs* **29**(3-4): 583-592.

AIMS AND OBJECTIVES: The main aim of this study was to investigate the indirect effects of emotional dissonance and workload on presenteeism and emotional exhaustion through sleep quality and relaxation. BACKGROUND: Numerous investigations have found that job demands are related to employees' health and behaviours, but additional studies are needed among nurse samples. Specifically, little is known about the relationships between nurses' emotional dissonance and workload on one hand, and presenteeism and emotional exhaustion on the other hand. Moreover, research is needed to further explore the psychological mechanisms underlying these relationships. DESIGN: We used a cross-sectional design. Our study was carried out between October 2015-February 2016. Precisely, we asked nurses from various French healthcare centres to fill out a questionnaire survey. We ensured to meticulously follow the STROBE guidelines for cross-sectional research in designing and reporting this study. METHOD: An empirical study with a sample of 378 nurses was conducted. RESULTS: In line with our hypotheses, our findings revealed that emotional dissonance and workload were negatively linked to sleep quality and relaxation, which were, in turn, related to lower levels of presenteeism and emotional exhaustion. Workload and emotional dissonance were also directly and positively related to emotional exhaustion, while emotional dissonance was associated with higher levels of presenteeism. Finally, the indirect effects of emotional dissonance and workload on emotional exhaustion through sleep quality as well as the indirect effects of emotional dissonance on emotional exhaustion through relaxation were significant and positive. CONCLUSIONS: Overall, our results provide insight into the effects of emotional dissonance and workload on presenteeism and emotional exhaustion through recovery processes. RELEVANCE TO CLINICAL PRACTICE: The present findings have some practical implications for reducing nurses' emotional exhaustion and presenteeism. Specifically, managers and organisations should try to design and craft jobs to decrease the presence of negative work characteristics (i.e., workload and emotional dissonance). Our results also suggest that recovery processes may be important factors to focus on.

Griffiths, P., Saville, C., Ball, J., et al. (2020). "Nursing workload, nurse staffing methodologies and tools: A systematic scoping review and discussion." *Int J Nurs Stud* **103**: 103487.

BACKGROUND: The importance of nurse staffing levels in acute hospital wards is widely recognised but evidence for tools to determine staffing requirements although extensive, has been reported to be weak. Building on a review of reviews undertaken in 2014, we set out to give an overview of the major

approaches to assessing nurse staffing requirements and identify recent evidence in order to address unanswered questions including the accuracy and effectiveness of tools. METHODS: We undertook a systematic scoping review. Searches of Medline, the Cochrane Library and CINAHL were used to identify recent primary research, which was reviewed in the context of conclusions from existing reviews. RESULTS: The published literature is extensive and describes a variety of uses for tools including establishment setting, daily deployment and retrospective review. There are a variety of approaches including professional judgement, simple volume-based methods (such as patient-to-nurse ratios), patient prototype/classification and timed-task approaches. Tools generally attempt to match staffing to a mean average demand or time requirement despite evidence of skewed demand distributions. The largest group of recent studies reported the evaluation of (mainly new) tools and systems, but provides little evidence of impacts on patient care and none on costs. Benefits of staffing levels set using the tools appear to be linked to increased staffing with no evidence of tools providing a more efficient or effective use of a given staff resource. Although there is evidence that staffing assessments made using tools may correlate with other assessments, different systems lead to dramatically different estimates of staffing requirements. While it is evident that there are many sources of variation in demand, the extent to which systems can deliver staffing levels to meet such demand is unclear. The assumption that staffing to meet average need is the optimal response to varying demand is untested and may be incorrect. CONCLUSIONS: Despite the importance of the question and the large volume of publication evidence about nurse staffing methods remains highly limited. There is no evidence to support the choice of any particular tool. Future research should focus on learning more about the use of existing tools rather than simply developing new ones. Priority research questions include how best to use tools to identify the required staffing level to meet varying patient need and the costs and consequences of using tools. TWEETABLE ABSTRACT: Decades of research on tools to determine nurse staffing requirements is largely uninformative. Little is known about the costs or consequences of widely used tools.

Kang, L., Ma, S., Chen, M., et al. (2020). "Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study." *Brain, behavior, and immunity* **87**: 11-17.

Kox, J., Bakker, E. J. M., Bierma-Zeinstra, S., et al. (2020). "Effective interventions for preventing work related physical health complaints in nursing students and novice nurses: A systematic review." *Nurse Educ Pract* **44**: 102772.

From the start of their career, nursing students and novice nurses are at risk of developing physical health problems due to high physical workload, which may lead to early exit from nursing. To provide an overview of interventions preventing physical health problems in early career, a systematic review was performed. A comprehensive search of the literature was conducted up to December 2017. Primary outcome of interest was education/work dropout. Secondary outcomes were musculoskeletal symptoms. Independent authors selected studies, appraised quality and extracted data. After screening 7111 titles and abstracts, eleven studies were included. Seven studies evaluated interventions for moving/handling training. Four evaluated other interventions. None focused on our primary outcome education/work dropout. All studies reported on physical complaints among student nurses only. Overall, risk of bias was high and clinical heterogeneity prohibited pooling of data. Intervention effects were small and inconsistent. In conclusion, evidence for the effectiveness of interventions in the nursing curricula for the prevention/treatment of physical complaints is scarce and where available conflicting. We recommend high quality research on dropout due to physical health problems, as well as on the prevention/treatment of physical complaints.

Kox, J., Groenewoud, J. H., Bakker, E. J. M., et al. (2020). "Reasons why Dutch novice nurses leave nursing: A qualitative approach." *Nurse Educ Pract* **47**.

Shortages in the nursing profession are increasing. It is, therefore, imperative to understand why novice nurses are leaving the profession. This qualitative study explores Dutch novice nurses' motives for leaving the profession. Individual semi-structured interviews were held with seventeen former

novice nurses who had decided to leave nursing within two years after graduation. Data was collected and analysed following the principles of Thematic Analysis, leading to six themes; 1) Lack of challenge; ambitious to progress further in management or research roles. 2) Lack of passion; no feeling of passion for patient care. 3) Lack of perceived competence; not feeling "up to the challenge". 4) Lack of job satisfaction due to heavy workload; work-life imbalance and inability to deliver high-quality care. 5) Lack of work capacity due to non-work-related health conditions; unmet requirements for job or work environment adjustment. 6) Lack of feeling of belonging; suffering from a negative attitude of colleagues to one another. To prevent novice nurse professional turnover, measures such as capacity building, supervisor support and a tailored personal development plan could be taken. To make novice nurses feel safe and reassured, support from colleagues and supervisors is important. Such measures require thoughtful implementation and evaluation.

Laville, C. (2020). "Comment améliorer les conditions de travail des infirmiers ?" Actualité Et Dossier En Santé Publique(110). 57-58

<https://www.hcsp.fr/explore.cgi/Adsp?clef=1171>

Mignot, A., Wilhelm, M. C., Valette, A., et al. (2020). "Behavior of nurses and nurse aides toward influenza vaccine: the impact of the perception of occupational working conditions." Hum Vaccin Immunother **16**(5): 1125-1131.

Although influenza vaccination of hospital healthcare workers (HCWs) has been associated with a reduction in patient mortality and morbidity, HCW vaccine coverage is low in France. Previous studies identified the role of perceptions of vaccine efficacy and safety as well as practical issues (e.g., limited time). We aimed to determine whether HCW behavior toward influenza vaccine was associated with occupation-related psycho-social issues and perceptions of management. Between February and August 2018, an anonymous online questionnaire explored the perceptions and behavior of nurses and nurse aides regarding the influenza vaccine, as well as the perceived quality of professional management, perceived psychological contract breach, perceived workload, and compassion fatigue using previously validated scales. Among the 791 respondents (mean age 36.9 ± 10 years, female 85.0%; nurses 76.4%), 28.6% had been vaccinated during the current year (i.e., the study year) and 13.0% during the previous year. Among those not vaccinated during the study year, their vaccination intention for the coming year on a 1-5 scale was 1/5 for 68.5% and 5/5 for 15.4%. Positive behavior/intention regarding the influenza vaccine (recent vaccination and/or high future intention) was positively correlated with perceptions of management and negatively correlated with feelings of a psychological contract breach and compassion fatigue. In multivariate analysis, this positive behavior/intention was correlated with management perception independently of the perceptions of vaccination itself. Among nurses and nurse aides, the propensity to be vaccinated appears to depend closely on the perceived working conditions. These factors should be addressed when promoting vaccination among these populations.

Nielson, M. H. et Halloran, L. (2020). "Not Everyone Should be a Nurse Practitioner." J Christ Nurs **37**(1): 46-51.

There has been an increase in student enrollment in advanced practice nurse programs, but limited information regarding attrition and dropout rates in nurse practitioner (NP) programs. Management of NP students includes student evaluations, preceptor guidance and support, student support, and use of reflective practice. Program directors, faculty members, and preceptors must assist NP students with role transitioning and help those who are not meeting the rigors of NP education to leave the program and discover alternative nursing roles.

Perez-Francisco, D. H., Duarte-Climent, G., del Rosario-Melian, J. M., et al. (2020). "Influence of Workload on Primary Care Nurses' Health and Burnout, Patients' Safety, and Quality of Care: Integrative Review." Healthcare **8**(1).

The increase in the demand for care has not led to a proportional growth in the number of primary care nurses. This imbalance is related to the decrease in the quality of care and patient safety, and also to the impact on the health of the professional group. The objective of this study is to identify

relationships between overload, illness of the nurse, professional exhaustion, quality and safety in the services; and differentiate study methods and instruments for measuring the phenomena. For this, a comprehensive and structured review of the literature following the scoping review model is performed. The studies on which this review is based allow us to recognize that the scope of this phenomenon is global. The review includes 45 studies that show that there is a high pressure of care for Primary Care nursing, who suffer many alterations of their health due to burnout syndrome and that this situation contributes to the impairment of the quality of care and patient safety. However, for future lines, new evidence is needed to determine the degree of relationship between the high pressure suffered by Primary Care nursing and the attainment of health goals for professionals and patients.

Revue Prescrire (2020). "Arrêts maladie chez les hospitaliers : impact fort des conditions de travail." Revue Prescrire **40**(444): 786-787.

Selon des enquêtes menées en France au cours des années 2010, le nombre de jours d'arrêt maladie observé chez les professionnels hospitaliers varie peu entre le secteur public et le secteur privé. Les raisons de ces arrêts maladie sont surtout liés aux conditions de travail, ainsi qu'à l'âge des salariés. Pénibilité des tâches et mécontentement par rapport à l'évolution de leur métier semblent être les principaux déterminants de l'état de santé des personnels hospitaliers, surtout infirmiers et aides-soignants.

Santana, I. R., Montes, M. A., Chalkley, M., et al. (2020). "The impact of extending nurse working hours on staff sickness absence: Evidence from a large mental health hospital in England." International Journal of Nursing Studies **112**: 103611.

Singh, C., Cross, W., Munro, I., et al. (2020). "Occupational stress facing nurse academics-A mixed-methods systematic review." J Clin Nurs **29**(5-6): 720-735.

Aim To better understand occupational stress faced by nurse academics. **Methods** A mixed-methods systematic review, following the Joanna Briggs Institute [JBI], (Joanna Briggs Institute Reviewers' Manual: 2014 edition, 2014) process. Studies were assessed for quality and risk of bias by using standardised critical appraisal instruments from the Joanna Briggs Institute. In addition, processes and reporting were checked against the Equator guidelines. See Appendix S1. **Results** The review revealed that nursing academics do experience occupational stress, including burnout. Occupational stress for academic nurses is associated with various factors including work-life balance, workload issues, resources and support, and adapting to change. However, much of the literature focuses on nurses during the initial transition from clinical to academic environment, with rather less focus on established mid-to-late career nurse academics. **Discussion** Occupational stress and burnout are evident in the university academic workforce, adversely affecting the well-being of academic nurses, and the long-term sustainability of the academic nursing workforce. While there is considerable literature focusing on the novice academic nurse, particularly during the transition period, rather less is known about occupational stress among academic nurses across the career trajectory. Various strategies to deal with the negative consequences of occupational stress are identified, including (a) quality mentors for novice and younger nursing academics; (b) training in resilience building for novice academics; (c) supporting collegial relationships and reducing bullying; (d) assistance for professional development and research; (e) better support and resources to overcome increasing workloads; and (f) greater work-related empowerment to enhance job satisfaction. **Conclusion** There is a need for a broader whole-of-career research focus to more fully identify, explore and mitigate the occupational stressors that negatively affect the academic nurse workforce. **Relevance to clinical practice** A strong and resilient academic nurse workforce is essential for the sustainability of the profession. Organisations should review their work practices and provide greater work-related empowerment to reduce occupational stressors among nursing academics.

Suleiman-Martos, N., Albendín-García, L., Gómez-Urquiza, J. L., et al. (2020). "Prevalence and Predictors of Burnout in Midwives: A Systematic Review and Meta-Analysis." Int J Environ Res Public Health **17**(2).

The prevalence of burnout in midwives has been briefly studied. Given the negative effects of burnout syndrome in the physical and mental health, and also related to the quality of care provided, rates of absenteeism and sick leave; identifying related factors for the syndrome are needed. The aim was to determine the prevalence, levels, and factors related to the burnout syndrome, measured with the Copenhagen Burnout Inventory in midwives. A systematic review and meta-analysis were selected from CINAHL, LILACS, ProQuest, PsycINFO, PubMed, SciELO, and Scopus databases, with the search equation "burnout AND (midwife OR midwives OR nurses midwives)". Fourteen articles were found with a total of 8959 midwives. Most of the studies showed moderate levels of personal burnout. The prevalence obtained was 50% (95% CI = 38-63) for personal burnout; 40% (95% CI = 32-49) for work-related burnout; and 10% (95% CI = 7-13) for client-related burnout. Midwives' age, less experience, and living alone constitute the main related factors, as well as, the scarcity of resources, work environment, and the care model used. Most midwives present personal and work-related burnout, which indicates a high risk of developing burnout. Personal factors and working conditions should be taken into account when assessing burnout risk profiles of midwives.

Van Poel, E., Ketels, M. et Clays, E. (2020). "The association between occupational physical activity, psychosocial factors and perceived work ability among nurses." *J Nurs Manag* **28**(7): 1696-1703.

Aim To examine the relationship between physical and psychosocial work-related risk factors and perceived work ability (PWA) among nurses. **Background** The work of nurses is challenging due to its high physical and mental workload. This might reduce PWA. A sustainable level of PWA is crucial to maintain well-being at work and to prevent early dropout. As a consequence, gaining a better understanding of which factors play a role in determining PWA is essential for health care organisations. **Methods** The associations between work-related risk factors and PWA were investigated among 114 nurses from Ghent University Hospital, Belgium. PWA and psychosocial factors were subjectively assessed. Occupational physical activity (OPA) was objectively measured over a period of 2-5 days using two accelerometers. **Results** No association between OPA and PWA was found. Multiple linear regression models revealed that job demands were negatively associated with PWA, whereas job control showed a positive association with PWA. **Conclusions** The results highlight the importance of psychosocial factors for more research on the PWA of nurses. Further investigation into the specific physical work demands of nurses is called for. **Implications for Nursing Management** Giving attention to psychosocial factors is crucial to enhance the PWA and well-being of nurses.

Woo, T., Ho, R., Tang, A., et al. (2020). "Global prevalence of burnout symptoms among nurses: A systematic review and meta-analysis." *J Psychiatr Res* **123**: 9-20.

WHO recently declared burnout as a "occupational phenomenon" in the International Classification of Diseases 11th revision (ICD-11), recognizing burnout as a serious health issue. Amongst healthcare workers, nurses are known to struggle with burnout symptoms the most, carrying serious consequences for patients, other healthcare professionals and healthcare organisations. Evidence has suggested that burnout symptoms in nurses is high across specialties and countries, but no meta-analysis have been performed to investigate burnout symptoms prevalence in nurses globally. We conducted a systematic review and meta-analysis to examine burnout symptoms prevalence in nurses worldwide using 8 academic research databases. Risk of bias, heterogeneity and subgroup analyses were further conducted in the meta-analysis. 113 studies were included for systematic review and 61 studies for the meta-analysis, consisting 45,539 nurses worldwide in 49 countries across multiple specialties. An overall pooled-prevalence of burnout symptoms among global nurses was 11.23%. Significant differences were noted between geographical regions, specialties and type of burnout measurement used. Sub-Saharan African region had the highest burnout symptoms prevalence rate while Europe and Central Asia region had the lowest. Paediatric nurses had the highest burnout symptoms prevalence rates among all specialties while Geriatric care nurses had the lowest. This study is the first study to synthesize published studies and to estimate pooled-prevalence of burnout symptoms among nurses globally. The findings suggest that nurses have high burnout symptoms

prevalence warranting attention and implementation. This study serves as an impetus for intervention studies and policy change to improve nurses' work conditions and overall healthcare quality.

Alharbi, J., Jackson, D. et Usher, K. (2019). "Compassion fatigue in critical care nurses An integrative review of the literature." Saudi Medical Journal **40**(11): 1087-1097.

Objectives: To provides a critical evaluation of current empirical evidence related to the prevalence, causes and outcomes of compassion fatigue among critical care nurses. Compassion fatigue is characterized the development of emotional, physical, and/or spiritual exhaustion as a result of working with traumatized individuals. Methods: Data was collected using an integrated review framework via an advanced search of healthcare databases; namely, ProQuest, Science Direct, and CINAHL for research articles on compassion fatigue among nurses in critical care settings. Analysis was performed on the articles which met the inclusion criteria for this review (n=10) to identify the key themes and issues related to the compassion fatigue in critical care situations. Articles were assessed for quality and rigor using the Critical Appraisal Checklist for Analytical Cross-Sectional Studies. The search was limited to research studies undertaken from 2000 to 2018. Results: The main findings to emerge from this integrative review was that the prevalence of compassion fatigue among nurses varied across the range of critical care settings. In terms of the causes and consequences of compassion fatigue, this review found work environment and nurse demographics such as age and years of experience, were predictors of compassion fatigue, and the factors mitigating compassion fatigue affects among critical nurse included leader and administrative support within the clinical setting and the coping strategies employed by the nurses. Conclusion: There is inconclusive evidence to identify unequivocal predictors of compassion fatigue among critical nurses. However, it is likely the onset of compassion fatigue among critical care nurses may be reduced with close monitoring of physical and emotional wellbeing in the critical care environment as well as through the provision of education to nurses to assist with the development of coping strategies to avoid compassion fatigue.

Bakker, E. J. M., Verhaegh, K. J., Kox, J., et al. (2019). "Late dropout from nursing education: An interview study of nursing students' experiences and reasons." Nurse Educ Pract **39**: 17-25.

The global shortages of nurses require a closer look at why nursing students stop in the later years of their degree programme. The purpose of this study is to explore nursing students' experiences and reasons that lead to this late dropout. Semi-structured interviews were held in 2017 with eleven former nursing students who dropped out in the third year of their Bachelor's Nursing degree programme in the Netherlands. Data was collected and analysed iteratively, following the principles of Thematic Analysis. Two core themes were identified: 'ending up in a downward spiral of physical, psychological and social problems' and 'experiencing an increasing mismatch between expectations and reality'. Reasons for late dropout from nursing education are diverse and interlinked. In contrast with studies on early dropout, academic difficulties did not play a major role in late dropout. Negative experiences during clinical placements led to dropout in both groups. One group lacked a safe learning environment in clinical placements, study coaching and psychological support. The other group missed realistic information provision about nursing education and the broad range of career opportunities in nursing.

Basset, M. (2019). J'ai rendu mon uniforme Monaco : Ed. du Rocher

« Ce n'est pas ça mon métier, Madame la Ministre ! » Le 27 décembre 2017, Mathilde Basset, jeune infirmière en EHPAD, rentre chez elle épuisée, démoralisée, avec le sentiment que ses conditions de travail lui font trahir ses valeurs de soignante. Elle lance sur Facebook un cri de colère pour dénoncer le manque de moyens, l'épuisement des soignants et la souffrance des personnes âgées, privées de contacts humains de qualité dans ce qui est devenu une véritable usine. Son message, repris par les médias, devient rapidement viral et ouvre le débat au niveau national. Dans cet ouvrage, elle raconte le quotidien, les difficultés et les craintes d'une profession à bout de forces et d'équipes en sous-effectif dont la formation ne correspond pas à la réalité du quotidien des hôpitaux. Entre distribution de pilules et soins à la chaîne, seule infirmière pour plus de 90 patients, ayant le sentiment de bâcler le

travail et de totalement négliger la relation humaine, la jeune infirmière, fraîchement sortie de formation et passionnée par son métier, se voit jour après jour devenir « stressée, stressante et maltraitante »... C'est la boule au ventre que, quelques jours plus tard, elle quittera son service. Un témoignage bouleversant qui oblige à regarder en face la question du destin que réserve notre société aux personnes âgées et à ceux qui prennent soin d'elles.

Brook, J., Aitken, L., Webb, R., et al. (2019). "Characteristics of successful interventions to reduce turnover and increase retention of early career nurses: A systematic review." *Int J Nurs Stud* **91**: 47-59.

BACKGROUND: Nurse shortages have been identified as central to workforce issues in healthcare systems globally and although interventions to increase the nursing workforce have been implemented, nurses leaving their roles, particularly in the first year after qualification, present a significant barrier to building the nurse workforce. **OBJECTIVE:** To evaluate the characteristics of successful interventions to promote retention and reduce turnover of early career nurses. **DESIGN:** This is a systematic review **DATA SOURCES:** Online databases including Academic Search Complete, Medline, Health Policy reference Centre, EMBASE, Psychinfo, CINAHL and the Cochrane Library were searched to identify relevant publications in English published between 2001 and April 2018. Studies included evaluated an intervention to increase retention or reduce turnover and used turnover or retention figures as a measure. **REVIEW METHODS:** The review was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines. Studies were quality-assessed using the Joanna Briggs Institute Critical Appraisal tools for Quasi Experimental and Randomised Controlled Trials. Retention/turnover data were used to guide the comparison between studies and appropriate measures of central tendency and dispersion were calculated and presented, based on the normality of the data. **RESULTS:** A total of 11, 656 papers were identified, of which 53 were eligible studies. A wide variety of interventions and components within those interventions were identified to improve nurse retention. Promising interventions appear to be either internship/residency programmes or orientation/transition to practice programmes, lasting between 27-52 weeks, with a teaching and preceptor and mentor component. **CONCLUSIONS:** Methodological issues impacted on the extent to which conclusions could be drawn, even though a large number of studies were identified. Future research should focus on standardising the reporting of interventions and outcome measures used to evaluate these interventions and carrying out further research with rigorous methodology. Clinical practice areas are recommended to assess their current interventions against the identified criteria to guide development of their effectiveness. Evaluations of cost-effectiveness are considered an important next step to maximise return on investment.

Chesak, S. S., Cutshall, S. M., Bowe, C. L., et al. (2019). "Stress Management Interventions for Nurses: Critical Literature Review." *J Holist Nurs* **37**(3): 288-295.

Background: The nursing literature contains numerous studies on stress management interventions for nurses, but their overall levels of evidence remain unclear. Holistic nurses use best-available evidence to guide practice with self-care interventions. Ongoing discovery of knowledge, dissemination of research findings, and evidence-based practice are the foundation of specialized practice in holistic nursing. This literature review aimed to identify the current level of evidence for stress management interventions for nurses. **Method:** A systematic search and review of the literature was used to summarize existing research related to stress management interventions for nurses and recommend directions for future research and practice. **Results:** Ninety articles met the inclusion criteria for this study and were categorized and analyzed for scientific rigor. Various stress management interventions for nurses have been investigated, most of which are aimed at treatment of the individual versus the environment. Contemporary studies only moderately meet the identified standards of research design. Issues identified include lack of randomized controlled trials, little use of common measurement instruments across studies, and paucity of investigations regarding organizational strategies to reduce nurses' stress. **Conclusion:** Future research is indicated to include well-designed randomized controlled trials, standardized measurement tools, and more emphasis on interventions aimed at the environment.

Cordina-Duverger, É., Houot, M., Tvardik, N., et al. (2019). "Prévalence du travail de nuit en France : caractérisation à partir d'une matrice emplois-expositions." Bulletin Épidémiologique Hebdomadaire(8-9): 168-174.

De multiples effets sanitaires, allant des troubles du sommeil aux maladies cardiovasculaires et au cancer, ont été attribués au travail de nuit ou d'autres horaires de travail atypiques. Dans cet article, la prévalence du travail de nuit en France et son évolution entre 1990 et 2013 sont décrites. Des matrices emplois-expositions (MEE) annuelles permettant de décrire les horaires de travail par profession et branche d'activité en France ont été développées à partir des données des enquêtes Emploi de l'Insee. La prévalence du travail de nuit a été estimée en croisant les MEE des années 1992, 1999 et 2012 avec le recensement de la population de 1990, 1999 et 2013. Le nombre de travailleurs de nuit habituels et occasionnels en France est passé de 3,3 millions (15,0% des actifs) en 1990 à 4,3 millions (16,3%) en 2013. Le travail de nuit habituel a présenté la plus forte progression au cours de cette période (de 800 000 à 1,9 million d'individus). En 2013, le travail de nuit habituel était principalement observé chez les infirmiers, sages-femmes et aides-soignants (n=274 435), les agents de surveillance, l'armée, les policiers et les pompiers (n=212 762) et les conducteurs routiers et livreurs (n=139 363). Ces chiffres montrent l'ampleur du recours au travail de nuit et l'augmentation importante du nombre de travailleurs de nuit habituels dans les années récentes. L'impact sanitaire associé à ces horaires de travail justifie la mise en place d'une veille sanitaire pour les travailleurs concernés.

Cougot, B., Fleury-Bahi, G., Gauvin, J., et al. (2019). "Exploring Perceptions of the Work Environment among Psychiatric Nursing Staff in France: A Qualitative Study Using Hierarchical Clustering Methods." International Journal of Environmental Research and Public Health **17**(1). :142

Most studies on workers' health are based on non-specific models of occupational stress, thereby limiting the understanding and research on efficient interventions. This qualitative approach aimed to explore the structure of resources and constraints in the working environment of nurses in a deliberately open approach. Semi-structured interviews were conducted with 37 nurses working in closed and open inpatient psychiatric wards in a French university hospital. The data were statistically analyzed using a hierarchical clustering method. Our model highlighted a systemic structure, describing the interactions, including patients, nurses, doctors, and managers in a specific material, communicational, and organizational environment. The results show a discursive structure organized around dimensions pertaining to "environment", "patients", "medical-care group", and "the individual". Our model showed interest in an interdisciplinary approach that encompasses occupational medicine and social psychology.

De Oliveira, S. M., de Alcantara Sousa, L. V., Vieira Gadelha, M. D. S., et al. (2019). "Prevention Actions of Burnout Syndrome in Nurses: An Integrating Literature Review." Clin Pract Epidemiol Ment Health **15**: 64-73.

AIMS: To identify the strategies for the prevention of burnout syndrome in nurses; and discuss the results for future interventions that can decrease burnout in these professionals. DESIGN: An integrative review of the literature. DATA SOURCES: PubMed, Lilacs, Medline, Scielo, and Science Direct, from April 2018 to July 2018. METHODS: The sources were in all 553 references were found. The following guiding question was: Which interventions for the prevention of burnout in nurses have been applied and have obtained high effectiveness? RESULTS: Based on the inclusion and exclusion factors, 30 studies were selected for analysis. The studies were categorized in individual, group and organizational, being the studies with actions in groups those of greater prevalence. CONCLUSION: The actions used to cope with burnout were, for the most part, effective, with some demonstrating greater success than others. From the 30 reviewed studies, the results did not obtain satisfactory improvement in burnout in only three interventions: 1) Systematic nursing supervision; 2) Basic nursing care; and 3) Psycho-oncological training program.

Dickason, R. (2019). "À la croisée des sciences infirmières et de gestion : la revalorisation de l'émotionnel et du compassionnel au Royaume-Uni comme exemple d'impact de la recherche sur la recherche et les pratiques." *Journal de gestion et d'économie de la santé* 4(4): 291-315.
<https://www.cairn.info/revue-journal-de-gestion-et-d-economie-de-la-sante-2019-4-page-291.htm>

À l'aune de transformations importantes du champ de la santé (innovations liées aux produits de santé, télémédecine, Big Data, etc.), les sciences de gestion – et plus particulièrement le management de la santé et des organisations de santé – sont amenées à produire des recherches susceptibles d'affecter les pratiques et les politiques publiques. Alors que les productions scientifiques dans le champ de la santé sont foisonnantes, se pose le double enjeu de leur diffusion et de la manière dont il est possible de garantir leur impact. En effet, si la proximité avec les organisations de santé semble un levier pertinent pour faciliter la production de recherches pouvant influencer sur les pratiques de gestion, voire les politiques publiques, l'on peut constater un problème de diffusion au sein du champ. Outre les sciences de gestion, les organisations de santé font (in)directement l'objet de recherches en sciences infirmières, une discipline qui traite de la population infirmière ou aide-soignante (en particulier dans les pays anglophones). L'objet de cet article est donc d'éclairer la question de l'impact de la recherche en nous appuyant sur un cas spécifique, issu des sciences infirmières, pour repérer quels enseignements en retirer pour les sciences de gestion, particulièrement à l'endroit des organisations de santé. Pour ce faire, nous avons étudié l'impact interne et externe des recherches en sciences infirmières sur le travail émotionnel infirmier (la gestion de ses émotions et de celles du patient) et sur les composantes émotionnelles, compassionnelles et relationnelles du travail infirmier dans les hôpitaux britanniques. À cet effet, nous avons analysé la littérature sur le sujet et examiné une documentation professionnelle, institutionnelle et gouvernementale. Nos résultats mettent en évidence trois dispositifs singuliers : (a) l'importance des sciences infirmières en tant que champ disciplinaire distinct, (b) l'utilisation de policy papers et (c) le rôle des think tanks.

Fishbein, D., Nambiar, S., McKenzie, K., et al. (2019). "Objective measures of workload in healthcare: a narrative review." *International Journal of Health Care Quality Assurance* 33(1): 1-17.

Purpose Workload is a critical concept in the evaluation of performance and quality in healthcare systems, but its definition relies on the perspective (e.g. individual clinician-level vs unit-level workload) and type of available metrics (e.g. objective vs subjective measures). The purpose of this paper is to provide an overview of objective measures of workload associated with direct care delivery in tertiary healthcare settings, with a focus on measures that can be obtained from electronic records to inform operationalization of workload measurement. Design/methodology/approach Relevant papers published between January 2008 and July 2018 were identified through a search in Pubmed and Compendex databases using the Sample, Phenomenon of Interest, Design, Evaluation, Research Type framework. Identified measures were classified into four levels of workload: task, patient, clinician and unit. Findings Of 30 papers reviewed, 9 used task-level metrics, 14 used patient-level metrics, 7 used clinician-level metrics and 20 used unit-level metrics. Key objective measures of workload include: patient turnover (n=9), volume of patients (n=6), acuity (n=6), nurse-to-patient ratios (n=5) and direct care time (n=5). Several methods for operationalization of these metrics into measurement tools were identified. Originality/value This review highlights the key objective workload measures available in electronic records that can be utilized to develop an operational approach for quantifying workload. Insights gained from this review can inform the design of processes to track workload and mitigate the effects of increased workload on patient outcomes and clinician performance.

Foster, K., Roche, M., Delgado, C., et al. (2019). "Resilience and mental health nursing: An integrative review of international literature." *Int J Ment Health Nurs* 28(1): 71-85.

Mental health nurses work in challenging and potentially high stress settings. Stressors can occur in the context of consumer, family, and/or staff relationships, as well as the work environment and organization. The cumulative effects of stress and professional challenges can lead to harmful impacts for mental health nurses including burnout and poorer physical and mental health. Resilience involves

a process of positive adaptation to stress and adversity. The aims of this integrative review were to examine understandings and perspectives on resilience, and explore and synthesize the state of knowledge on resilience in mental health nursing. Following systematic search processes, screening, and data extraction, 12 articles were included. Constant comparative analysis and synthesis of the data resulted in two key categories: Theoretical concepts of resilience and Knowledge on mental health nurses' resilience. In mental health nursing, resilience has been variously constructed as an individual ability, collective capacity, or as an interactive person-environment process. Resilience was most often reported as low-moderate, with positive correlations with hardiness, self-esteem, life and job satisfaction, and negative correlations with depression and burnout. A resilience programme improved mental health nurses' coping self-efficacy and capacity to regulate thoughts and emotions and developed their resilient practice. Use of contemporary resilience definitions will inform more consistent investigation and progressively scaffold knowledge of this emergent construct in mental health nursing. Future research on the implementation of resilience programmes and resilience-building strategies for mental health nurses at the individual, work unit, and organizational levels is needed.

Fournier, C. et Mousques, J. (2019). "Construction et impact d'une coopération entre médecins généralistes et infirmières : le dispositif Asalée." *Actualité Et Dossier En Santé Publique*(107): 31-33.

La coopération entre médecins généralistes et infirmières est considérée comme un levier pour améliorer les conditions, l'organisation et la qualité du travail en soins de premier recours, voire la performance. En France, le dispositif action de santé libérale en équipe (Asalée) expérimente depuis 2004 la coopération entre médecins généralistes et infirmières Asalée. Il offre un cadre pour le développement de pratiques avancées infirmières, comprenant notamment des tâches de dépistage, de suivi et d'éducation thérapeutique. À travers une synthèse des enseignements tirés des travaux de recherche évaluative conduits sur le dispositif, cet article a pour objet de discuter de l'opportunité et des conditions de développement de telles pratiques dans un contexte prévoyant en 2019, suite à la reconnaissance en 2018 d'un métier et d'un diplôme d'infirmier en pratiques avancées, de nouvelles mesures relatives à leurs rémunérations et à la modalité d'exercice en maisons et centres de santé pluriprofessionnels.

Friganović, A., Selič, P., Ilić, B., et al. (2019). "Stress and burnout syndrome and their associations with coping and job satisfaction in critical care nurses: a literature review." *Psychiatr Danub* **31**(Suppl 1): 21-31.

BACKGROUND: Burnout is usually defined as a prolonged response to chronic emotional and interpersonal stressors, characterized by emotional exhaustion, depersonalization and lack of social accomplishment. Coping mechanisms and job satisfaction are associated with the incidence of burnout symptoms in a work context. **SUBJECTS AND METHODS:** The aim of this paper was to make a systematic analysis of the literature related to nurses' stress and the incidence of burnout syndrome in intensive care nurses, and also to determine the research into associations between coping mechanisms and job satisfaction on one side, and burnout on the other side. Appropriate databases (Scopus, PubMed) were searched with the aim of finding relevant studies and articles published in the last 15 years. The keywords were burnout, coping mechanisms, job satisfaction, nurses, and intensive care. Two independent reviewers carried out a selection of the studies. **RESULTS:** The literature review found 786 studies about burnout and its association with different variables. Twenty-nine original research papers were discovered in this review process. Open questions still remain concerning burnout and the associations between the considered variables. We also found that studies using a qualitative approach, which could provide better insight into the investigation of burnout, was insufficient in this area. **CONCLUSION:** Burnout syndrome is serious problem for healthcare systems and affects almost all profiles of healthcare workers. Although burnout is an evidence-based public health problem, there is still no systematic approach to prevention. Prevention activities to reduce stress and the incidence of burnout should be provided for nurses, especially those in very demanding posts.

Hoff, T., Carabetta, S. et Collinson, G. E. (2019). "Satisfaction, Burnout, and Turnover Among Nurse Practitioners and Physician Assistants: A Review of the Empirical Literature." *Med Care Res Rev* **76**(1): 3-31.

Examining the work-related psychological states of nurse practitioners and physician assistants is important, given their increased role expansion. The current PRISMA-guided review examined studies published between 2000 and 2016 for both these groups. The review also examined features of the research to draw conclusions about overall quality. Applying theories in job enrichment and job demands, 32 articles were identified that contained analyses of satisfaction, burnout, stress, and turnover. Key findings include the lack of robust research designs, overemphasis on job satisfaction, lower levels of satisfaction across both groups, and higher intrinsic versus extrinsic satisfaction levels generally. The literature can develop by using larger, more representative samples, including subgroup analyses that incorporate everyday work contexts, and more predictive modeling. The results suggest that both occupations experience role expansion in both positive and negative ways that may require additional policy or managerial interventions.

Kagwe, J., Jones, S. et Johnson, S. L. (2019). "Factors Related to Intention to Leave and Job Satisfaction among Registered Nurses at a Large Psychiatric Hospital." *Issues in Mental Health Nursing* **40**(9): 754-759.
<https://doi.org/10.1080/01612840.2019.1611977>

Abstract Introduction: Current shortages of registered nurses working in psychiatric hospitals in the United States are exacerbated by turnover. Aim: This research describes factors that are associated with intent to leave among nurses working in a large inpatient psychiatric hospital. Method: This was a descriptive, correlational study. Results: 75% of respondents (n=?94) reported that they were satisfied with their current positions. 36% (n=?34) reported actively seeking employment elsewhere. Intent to leave correlated with perceptions about workplace relationships and work environment factors. Discussion: Work relationships, opportunity for education, and recognition for education were factors that were primarily related to intent to leave.

Karakachian, A. et Colbert, A. (2019). "Nurses' Moral Distress, Burnout, and Intentions to Leave: An Integrative Review." *J Forensic Nurs* **15**(3): 133-142.

Moral distress has been widely addressed across the nursing profession and within other disciplines. Forensic nurses are a vital part of the nursing profession as they care for complex patients who may suffer physically and psychologically. However, forensic nurses' moral distress in the context of caring for victims of violence has not been addressed. This integrative review of the literature reveals the consequences of moral distress on the nursing workforce particularly regarding nurses' burnout and intentions to leave their jobs. Turnover contributes to the country's critical shortage of nurses, which affects the quality of care patients receive and increases the costs for healthcare institutions.

Laraqui, O., Manar, N. et Laraqui, S. (2019). "Risques psychosociaux et syndrome d'épuisement professionnel des professionnels de soins hospitaliers." *Archives des Maladies Professionnelles et de l'Environnement*: 386-397.

Le personnel hospitalier constitue une cible particulière des risques psychosociaux notamment le stress et le burnout. Le burnout ou syndrome d'épuisement professionnel est consécutif à l'exposition à un stress permanent et prolongé. Il concerne les professions à fortes sollicitations mentales, émotionnelles et affectives et à forte responsabilité tels les soignants. L'objectif de cette étude était d'apprécier les risques psychosociaux, le syndrome d'épuisement professionnel et ses composantes chez les professionnels de soins hospitaliers. Cette étude observationnelle et transversale a intéressé 1583 professionnels de santé travaillant dans des structures hospitalières de Casablanca. La conjonction de la tension au travail (jobstrain), de l'environnement professionnel désagréable (locaux et matériels inadéquats) et des difficultés socioéconomiques (salaires bas, problèmes de trajet, etc.) constituerait le principal facteur de risque du BO qui étaient plus élevés chez les infirmiers que chez les médecins.

López-López, I. M., Gómez-Urquiza, J. L., Cañadas, G. R., et al. (2019). "Prevalence of burnout in mental health nurses and related factors: a systematic review and meta-analysis." *Int J Ment Health Nurs* **28**(5): 1032-1041.

The aim of this study was to determine the prevalence of burnout in mental health nurses and to identify its predictors. A systematic review was conducted of studies published in the following databases: CINAHL, Dialnet, LILACS, ProQuest, PsycINFO, PubMed, SciELO, and Scopus. The search equation used was "Nurs * AND Burnout AND mental health". Subsequently, three fixed-effects meta-analyses were performed, one for each dimension of burnout, to calculate its prevalence and the corresponding confidence intervals. The data were analysed using StatsDirect meta-analysis software. Eleven studies were finally included (n = 11). In most cases, the literature informs about moderate levels of emotional exhaustion, depersonalization, and personal accomplishment. The studies inform that variables such as work overload, work-related stress, professional seniority, male gender, being single, and aggression at work, among other factors, contribute to burnout development. The meta-analytic prevalence estimations of burnout with a sample of n = 868 mental health nurses are 25% for high emotional exhaustion, 15% for depersonalization, and 22% for low personal accomplishment. From a workforce development and safety perspective, it is important for managers to address the emotional exhaustion and low personal accomplishment aspects of burnout reported in the workplace by mental health nurses.

Lu, H., Zhao, Y. et While, A. (2019). "Job satisfaction among hospital nurses: A literature review." *Int J Nurs Stud* **94**: 21-31.

BACKGROUND: Globally there are mounting concerns about nurses' job satisfaction because of its pivotal role in nurse turnover and the quality of care of patients. **OBJECTIVES:** To identify a more comprehensive and extensive knowledge of the job satisfaction of qualified general nurses working in acute care hospitals and its associated factors drawing upon empirical literature published in the last five years. **DESIGN:** Literature review. **DATA SOURCES:** A comprehensive electronic database search was conducted in PubMed (2012-2017), Web of Science (2012-2017), CINAHL (2012-2017), Embase (2012-2017), PsycINFO (2012-2017) and the Applied Social Sciences Index (2012-2017), CNKI (2012-2017), WanFang (2012-2017), SinoMed (2012-2017) and VIP (2012-2017) to retrieve relevant articles published in both English and Chinese between January 2012 and October 2017. **REVIEW METHODS:** Key terms and phrases associated with job satisfaction, occupational stress, professional commitment, role conflict and role ambiguity were utilized in the subject search in combination with nurses following guidelines for searching the OVID interface. The abstracts or full texts of research papers were reviewed prior to their inclusion in the review according to inclusion criteria and quality assessment using the Strobe guidelines. **RESULTS:** A total of 59 papers were included in this review. The impact of job satisfaction upon sickness absence, turnover intention, as well as the influencing factors of job satisfaction such as working shift and leadership, job performance, organizational commitment, effort and reward style has been identified in a number of research studies yielding equivocal findings. Job satisfaction of hospital nurses is closely related to work environment, structural empowerment, organizational commitment, professional commitment, job stress, patient satisfaction, patient-nurse ratios, social capital, evidence-based practice and ethnic background. Various mediating or moderating pathways have been identified with nurses' job satisfaction being mediated by various factors. **CONCLUSIONS:** It is vital to increase nurses' job satisfaction because this has the potential both to improve patients' perceptions of care quality and ensure an adequate nursing workforce. The indirect relationships and predictors of job satisfaction contribute to a more comprehensive understanding of the complex phenomenon of job satisfaction, which in turn may aid the development of effective strategies to address the nursing shortage and increase the quality of patient care.

Maharaj, S., Lees, T. et Lal, S. (2019). "Prevalence and Risk Factors of Depression, Anxiety, and Stress in a Cohort of Australian Nurses." *Int J Environ Res Public Health* **16**(1): 61.

<https://www.mdpi.com/1660-4601/16/1/61>

Nurses remain at the forefront of patient care. However, their heavy workload as a career can leave them overworked and stressed. The demanding nature of the occupation exposes nurses to a higher risk of developing negative mental states such as depression, anxiety, and stress. Hence, the current study aimed to assess the prevalence and risk factors of these mental states in a representative sample of Australian nurses. The Depression Anxiety Stress Scale was administered to 102 nurses. Information about demographic and work characteristics were obtained using lifestyle and in-house designed questionnaires. Prevalence rates of depression, anxiety, and stress were found to be 32.4%, 41.2%, and 41.2% respectively. Binominal logistic regressions for depression and stress were significant ($p = 0.007$, $p = 0.009$). Job dissatisfaction significantly predicted a higher risk of nurses developing symptoms of depression and stress respectively ($p = 0.009$, $p = 0.011$). Poor mental health among nurses may not only be detrimental to the individual but may also hinder professional performance and in turn, the quality of patient care provided. Further research in the area is required to identify support strategies and interventions that may improve the health and wellbeing of nursing professionals and hence the quality of care delivered.

Rosa, D., Terzoni, S., Dellafiore, F., et al. (2019). "Systematic review of shift work and nurses' health." *Occup Med (Lond)* **69**(4): 237-243.

BACKGROUND: Nursing is characterized by a working articulation in shifts to ensure continuity of care throughout the 24 h. However, shift work and the resulting desynchronization of circadian rhythms may have adverse effects on nurses' health. **AIMS:** To describe the effects of shift work and desynchronization of circadian rhythms on nurse's health. **METHODS:** Databases: PubMed, Cinahl, Scopus, Embase and Ilisi. Search terms (free terms, MeSH): 'nurses', 'shiftwork', 'nightwork', 'sleep disorder, circadian rhythm', 'work schedule tolerance', 'breast neoplasm', 'metabolic syndrome X', 'metabolic cardiovascular syndrome', 'Cardiovascular disease', 'stress', 'diabetes'. We included all randomized controlled trials, observational studies, reviews and papers studying nurses' shift work. Quality assessment of the retrieved papers was verified according to Dixon-Woods checklist. **RESULTS:** Twenty-four articles were analyzed. Literature review has shown that shift work involves an alteration in psychophysical homeostasis, with a decrease in performance. It is an obstacle for social and family relationships, as well as a risk factor for stress, sleep disorders, metabolic disorders, diabetes, cardiovascular disorders and breast cancer. **CONCLUSIONS:** An organized ergonomic turnaround can be less detrimental to the health of nurses and more beneficial for the healthcare providers. Therefore, we suggest organizing studies to assess whether improving nurses' health would lead to a reduction in miscarriages, absenteeism and work-related stress.

Scanlan, J. N. et Still, M. (2019). "Relationships between burnout, turnover intention, job satisfaction, job demands and job resources for mental health personnel in an Australian mental health service." *BMC Health Serv Res* **19**(1): 62.
<https://doi.org/10.1186/s12913-018-3841-z>

Burnout and employee turnover in mental health services are costly and can have a negative impact on service user outcomes. Using the Job Demands-Resources model as a foundation, the aim of this study was to explore the relationships between burnout, turnover intention and job satisfaction in relation to specific job demands and job resources present in the workplace in the context of one Australian mental health service with approximately 1100 clinical staff.

Schaffert, R. et Robin, D. (2019). "Que souhaitent les infirmières pour rester dans la profession ?" *Soins infirmiers*: 64-66.

Quelques années après avoir terminé leur formation, la majorité des infirmières et infirmiers souhaitent rester dans la profession. C'est ce que montrent les résultats d'une étude longitudinale nationale en Suisse sur l'entrée dans la vie active des diplômées 2011/2012. Néanmoins, les conditions-cadres doivent impérativement évoluer pour que le personnel reste dans la branche.

Seabra, P. R. C. et Lopes, J. M. O. (2019). "A national survey of the nurses' mental health - The case of Portugal." *Nursing Rev* **54**(3): 425-433.

AIM: To understand Portuguese nurses' perceptions of their mental health. **BACKGROUND:** The impact of nurses' health and well-being on the quality and safety of the care they provide is well known. In Portugal, there are no representative studies regarding nurses' mental health. **MATERIALS AND METHODS:** Transversal, analytical, and observational methods were used, with a quantitative approach. Participants answered questions through an online form. We collected data concerning social-professional characterization, general health status, and mental health. The General Health Questionnaire-28 (GHQ-28) was used. **RESULTS:** A total of 1264 nurses participated in a nonrandomized sample. Two-thirds revealed a negative perception of their mental health. Of these, 22.2% reported severe depression symptoms, 71.6% indicated significant somatic symptoms, 76% showed significant anxiety, and 94.1% presented some kind of social dysfunction. **CONCLUSION:** Better mental health is associated with being part of a larger household, enjoying more hours of sleep, having more free weekends, being male, working as a specialist, and engaging in leisure activities. Worse mental health is associated with being older, having a longer career, working more hours, and practicing in the hospital context. **IMPLICATIONS FOR NURSING PRACTICE:** The professionals' living and working conditions must be addressed by their managers.

Van Hoek, G., Portzky, M. et Franck, E. (2019). "The influence of socio-demographic factors, resilience and stress reducing activities on academic outcomes of undergraduate nursing students: A cross-sectional research study." *Nurse Educ Today* **72**: 90-96.

BACKGROUND: Nursing students who stop their education before obtaining their degree (dropout) is a common problem. Scientific studies on factors influencing academic outcomes amongst nursing students are sparse and difficult to transfer to undergraduate nursing students. **OBJECTIVES:** The objective of the present study was to explore in undergraduate nursing students the influence of socio-demographic factors, resilience and stress reducing activities on the academic outcomes: intention to leave, academic success and dropout. **DESIGN:** A cross-sectional design was used. **PARTICIPANTS/SETTING:** 554 participants from 6 nursing colleges in the Antwerp region in Belgium were included. **METHODS:** Data were collected using SurveyMonkey®. In a second phase, these data were linked to the academic outcomes from the school administration. **RESULTS:** Lower resilience, more destructive and less positive stress reducing activities, having committed a suicide attempt in the past, studying in a densely populated area and starting as a regular student was significantly influenced with higher intentions to leave. Higher resilience significantly predicted academic success. Finally, students that dropped out showed a significantly lower resilience. **CONCLUSION:** Resilience was the only factor that significantly predicted the three academic outcomes: intention to leave, academic success and dropout. Known predictors of academic outcomes such as young age, gender, previous education, nationality and caring for family members were not confirmed in this study. To study in depth dropout within the undergraduate nursing course, conducting a cohort study might be recommended.

Yu, F., Raphael, D., Mackay, L., et al. (2019). "Personal and work-related factors associated with nurse resilience: A systematic review." *Int J Nurs Stud* **93**: 129-140.

BACKGROUND: Nursing shortages have profoundly impacted hospitals and consequently increased financial expenditure, resulting in work overload, thus augmenting nurses' stress and burnout levels. Studies have found that resilience helps nurses reduce the effects of stress and burnout. However, the factors associated with nurse resilience are yet to be determined. **OBJECTIVES:** This systematic review aims to identify the associated personal and work-related factors of nurse resilience. **DESIGN:** This systematic review has been registered in the international prospective register of systematic reviews (Registered Number: CRD 42018094080). Results are reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses protocol. **DATA SOURCES:** The systematic search was undertaken between March and April 2018 in five databases: CINAHL Plus, MEDLINE (Ovid), PsycINFO, EMBASE, and Scopus. The searched terms combined in each database were: resilience, hardiness,

work, employ, occupation, job, and nursing. REVIEW METHODS: Full-text English articles published between 2000 and 2018 were included. Studies were also included if they involved: (1) nurses who provided direct patient care, (2) resilience and its associated factors, (3) an empirical quantitative study, and (4) a quality assessment grade of 'good' or 'fair'. Two authors carried out the study eligibility and quality assessment independently. A narrative synthesis was utilised following the Job Demands-Resources model to identify the factors of job demands and resources, which were associated with nurse resilience. RESULTS: A total of 38 articles met the criteria and were systematically reviewed and narratively synthesised. Various resilience scales utilised in these studies made it unfeasible to synthesise the evidence using a meta-analysis. Inconsistencies exist when examining personal and work-related factors. Job demands (stress, burnout, posttraumatic stress disorder, and workplace bullying) were negatively associated with resilience, while job resources (coping skills, self-efficacy, social support, job satisfaction, job retention, and general wellbeing) were positively related to resilience. Using a quality assessment tool, 23 studies were rated as 'Good', 15 were assessed as 'Fair', and 20 were found to have a risk of bias. CONCLUSIONS: Understanding nurse resilience can proactively help nurses identify or prevent potential problems, thus fostering job resources and ultimately achieving personal and professional growth. Increased nurse resilience can help nurses reduce emotional exhaustion, increase work engagement, and enhance function when facing workplace challenges. This can assist nurses to establish strategies to deal with adversity and attenuate the effects of job demands. Further research is needed to explore nurse resilience and develop a consistent instrument for measuring resilience.

An, W., Zeng, L., Liu, J., et al. (2018). "Mental Health of Nurses Working at a Government-designated Hospital During a MERS-CoV Outbreak: A Cross-sectional Study." *J Nurs Scholarsh* **32**(1): 2-6.

BACKGROUND: During an epidemic of a novel infectious disease, many healthcare workers suffer from mental health problems. OBJECTIVES: The aims of this study were to test the following hypotheses: stigma and hardiness exert both direct effects on mental health and also indirect (mediated) effects on mental health through stress in nurses working at a government-designated hospital during a Middle East Respiratory Syndrome coronavirus (MERS-CoV) epidemic. METHODS: A total of 187 participants were recruited using a convenience sampling method. The direct and indirect effects related to the study hypotheses were computed using a series of ordinary least-squares regressions and 95% bootstrap confidence intervals with 10,000 bootstrap resamples from the data. DISCUSSIONS: The influences of stigma and hardiness on mental health were partially mediated through stress in nurses working at a hospital during a MERS-CoV epidemic. Their mental health was influenced more by direct effects than by indirect effects.

Bakker, E. J. M., Kox, J., Miedema, H. S., et al. (2018). "Physical and mental determinants of dropout and retention among nursing students: protocol of the SPRiNG cohort study." *BMC Nurs* **17**: 27.

BACKGROUND: The shortage of nursing professionals is of growing concern. The causes of this include the demanding physical and mental workload, leading to a dropout of nurses that may start during their education. However, it is unclear to what extent nursing students already perceive a physical and mental workload leading to health problems during their nursing education and placement, and to what extent these health problems cause students to dropout from nursing education. Very few prospective cohort studies have investigated protective and risk factors in relation to dropout and retention among nursing students. METHODS: Three cohorts of third-year nursing students will be followed for 2.5 years. Students will be enrolled from the Bachelor of Nursing program of the Rotterdam University of Applied Sciences. At baseline, students will receive a self-administered questionnaire. Primary outcome is dropout from nursing education and dropout from the nursing profession. Data on dropout from nursing education will be retrieved from the student administration on a yearly basis. Dropout from the nursing profession will be measured one year after graduation, using the self-reported questionnaire. Secondary outcomes are presenteeism and sick leave (during internship/work). In addition to student characteristics, the questionnaire asks about physical and mental internship/work characteristics, personal and behavioral factors, and experienced physical and mental burden. Main aims of this study are to determine: 1) the prevalence and incidence rates of

dropout, 2) the protective and risk factors, and early indicators of dropout, and 3) the interaction between these factors and the indicators. DISCUSSION: Data analysis of a large, prospective cohort study with regard to determinants of dropout and retention of nursing students and newly graduated nurses is in progress. Findings emerging from this study can be used to develop a predictive model to identify the first indicators of dropout from nursing education and nursing profession, for which targeted interventions can be deployed.

Barrientos-Trigo, S., Vega-Vázquez, L., De Diego-Cordero, R., et al. (2018). "Interventions to improve working conditions of nursing staff in acute care hospitals: Scoping review." *J Nurs Manag* **26**(2): 94-107.

AIM: To conduct a scoping review to examine and map the interventions proposed for the improvement of the working conditions of nursing staff in acute care hospitals. BACKGROUND: The Registered Nurse Forecasting (RN4CAST) project and other studies have determined the impact that the nursing staff has on the quality of care. The nursing staff's higher levels of burnout, job dissatisfaction and negative perception of the quality of care provided caused worse health outcomes. METHODS: A scoping review was carried out. By searching in SCOPUS, PubMed, CINAHL, Cochrane, Dialnet and in the grey literature, 705 potentially relevant papers were identified. The final analysis included 21 papers and three grey documents. RESULTS: The studies analysed proposed interventions at the macro-management, meso-management and micro-management levels, although the interventions at the macro- and meso-levels produce better staff outcomes. CONCLUSIONS: The findings of this review can be applied to management at different levels: measures to improve the patient-nurse ratio at the macro-management level, the horizontal hierarchies at the meso-management level, the mind-body techniques at the micro-management level. IMPLICATIONS FOR NURSING MANAGEMENT: Nurse managers and leaders should implement interventions at different organisational levels to improve the working conditions of the nursing staff and other health outcomes.

De Berny, C. et Mangeney, C. (2018). Le parcours des infirmiers en Île-de-France. Paris ORSIF <https://www.ors-idf.org/nos-travaux/publications/le-parcours-des-infirmiers-en-ile-de-france.html>

Menée à partir de nombreuses données d'enquête, l'analyse présentée dans ce document fournit un état de la connaissance sur la situation des infirmiers en Île-de-France depuis leur inscription en institut de formation jusqu'à leur insertion sur le marché du travail. Parmi les résultats marquants : Une offre de formation francilienne qui se révèle conséquente et attractive ; Un début de carrière qui se fait en Île-de-France ; Un manque de données pour analyser les parcours professionnels au-delà du premier emploi, pour connaître les pratiques, les conditions de vie et d'exercice en Île-de-France et pour quantifier les mobilités interrégionales et les cessations d'activités ;

Douguet, F. et Vilbrod, A. (2018). Les infirmières libérales. Une profession face au défi des soins à domicile, Paris : Seli Arslan

Dans le contexte de séjours hospitaliers sans cesse raccourcis et du déploiement de la chirurgie ambulatoire, le secteur des soins à domicile est toujours plus amené à se développer. Face à ce défi, les infirmières libérales occupent une place centrale. Elles participent au maintien chez elles des personnes âgées dépendantes, et leur rôle s'accroît en vue de soigner des malades chroniques ou en fin de vie. Ces évolutions tendent à redéfinir l'exercice libéral qui devient plus technique, et plus attractif aussi en raison de la dégradation des conditions de travail des infirmières à l'hôpital. Cet ouvrage expose la teneur réelle du travail des infirmières libérales en tenant compte de ces changements récents. Les auteurs s'appuient sur une enquête approfondie et de nombreux entretiens menés auprès de professionnelles. Ils abordent leur formation, leurs modes d'entrée dans la profession et rendent compte de la richesse de leurs pratiques. Les analyses soulignent les spécificités de l'activité des infirmières libérales. Ainsi, les soins réalisés comme les relations avec les autres professionnels de la santé, les patients ou les familles diffèrent de ce que la plupart d'entre elles ont vécu en structure hospitalière. Se dessinent alors les contours d'un métier exigeant, comme le montrent les nombreux témoignages. Celui-ci requiert un engagement sans faille, ce qui laisse peu de

temps pour la vie à côté. Ce livre révèle les multiples dimensions du métier d'infirmière libérale. Il permettra aux divers acteurs de la santé de mieux connaître ces professionnelles et de comprendre les enjeux des soins à domicile, en pleine expansion. Les infirmières envisageant un passage en libéral pourront pour leur part se familiariser avec la réalité d'un travail aux prises avec bien des évolutions, qu'elles soient médicales, réglementaires ou sociétales (4è de couv.)

Dugue, M., Garnarczyk, C. et Dosseville, F. (2018). "[Psychological characteristics of stress in nursing student]." *Rev Epidemiol Sante Publique* **66**(6): 347-354.

BACKGROUND: Student nurses have perceived stress higher than students taking other training courses. The objective of this work was to investigate psychological characteristics of nursing students in an attempt to understand why they are more subject to stress than others. **METHODS:** We carried out a self-administered questionnaire survey to compare students taking various training courses (i.e., sport sciences, psychology, medicine, and nursing). Perceived stress and health, high-risk behaviors, different psychological determinants of stress (i.e. coping, emotional skills, resilience, self-esteem, personality, chronotype) were assessed. **RESULTS:** Multiple linear regression analysis yielded a model showing that seven independent variables were correlated with perceived stress among students: perceived health, neuroticism, stress tolerance, active coping, understanding of one's own emotions, chronotype amplitude, and use of one's own feelings. Moreover, medicine and nursing students were more stressed and perceived their health in a more negative way than students taking other training courses. Nursing students were also less stress tolerant. **CONCLUSION:** The regression model suggests that psychological characteristics influence stress level among students. Moreover, the results show that medicine and nursing students differ from other students on resilience in stress tolerance dimension as well as on a set of behaviors. Practical perspectives are discussed.

Han, R. M., Carter, P. et Champion, J. D. (2018). "Relationships among factors affecting advanced practice registered nurses' job satisfaction and intent to leave: A systematic review." *J Am Assoc Nurse Pract* **30**(2): 101-113.

BACKGROUND AND PURPOSE: This systematic review explores relationships between advanced practice registered nurses' (APRN) job satisfaction and intent to leave. There exists a dearth of APRN providers compared with the ever-growing need for their services. Furthermore, the organizational costs associated with the APRN turnover are extremely high. It, therefore, behooves practice administrators to understand what factors most contribute to APRN job satisfaction and retention. **METHODS:** A search of research databases CINAHL, PubMed, and PsycINFO, using keywords "Advanced Practice Registered Nurse," "job satisfaction," "intent to leave," "anticipated turnover," and "Nurse Practitioner" to yield articles included in this review. **CONCLUSIONS:** The strength of existing evidence for this topic is weak. Studies have found that extrinsic factors, such as administrative support and salary, significantly contribute to job dissatisfaction, whereas intrinsic factors, such as autonomy and finding work meaningful, most significantly contribute to job satisfaction. Additional research is needed to better understand the factors relating to APRN job satisfaction and dissatisfaction, and how those factors influence practitioners' intent to leave. **IMPLICATIONS FOR PRACTICE:** Efforts to improve APRN job satisfaction will have positive implications for provider retention, practices, and patients. Administrators should consider the job satisfaction factors identified herein when implementing practice improvement and retention efforts.

Kandelman, N., Mazars, T. et Levy, A. (2018). "Risk factors for burnout among caregivers working in nursing homes." *Int J Environ Res Public Health* **27**(1-2): e147-e153.

AIMS AND OBJECTIVES: (i) To assess the level of burnout in nursing home caregivers within a unique healthcare network in France and (ii) to evaluate potential risk factors in this population. **BACKGROUND:** Burnout syndrome occurs frequently among nursing home caregivers and has strong detrimental effects on the quality of health care for residents. **DESIGN:** We used an observational survey to study burnout in nursing home caregivers. The survey was used to quantify burnout level (Maslach Burnout Inventory) and potential risk factors and was implemented from October 2013-April

2014. METHODS: A logistic regression was used to explore the association between burnout and its risk factors. RESULTS: Three hundred and sixty questionnaires were delivered to caregivers in 14 nursing homes within a unique healthcare network. The response rate was 37% (132/360), and 124/132 (94%) surveys were analysed. Caregiver burnout rate was 40% (49/124). Median age was 41 years (range, 20-70) and most caregivers were female. The most common profession (n = 54; 44%) was nurse caregiver and 90% (n = 112) had an antecedent of bullying by a resident. Risk factors identified were as follows: the presence of institutional protocols (death announcement [OR: 3.7] and pain assessment [OR: 2.8]), working in a profit-making establishment (OR: 2.6) and the antecedent of bullying by a resident (OR: 6.2). Factors most negatively associated with burnout included: practising pastimes (OR: 0.4) and working as a nurse (OR: 0.3). The only significant risk factor in the multivariate analysis was the antecedent of bullying by a resident (OR: 5.3). CONCLUSION: Several specific risk factors for burnout in nursing home caregivers were identified. RELEVANCE TO CLINICAL PRACTICE: In high-risk populations of healthcare professionals, screening and management of risk factors is crucial for preventing burnout.

Labrague, L. J. et McEnroe-Petitte, D. M. (2018). "Job stress in new nurses during the transition period: an integrative review." *Int Nurs Rev* **65**(4): 491-504.

AIM: This review appraised and synthesized evidence relating to new nurses' stress experiences during the transition period. BACKGROUND: Although stress among nursing professionals has been a subject of several systematic reviews in the recent years, there is still scarcity of systematic evidence examining job stress in new nurses. METHODS: This is an integrative review of original studies conducted from 2002 onwards examining new nurses' stress experiences. Five databases were used to retrieve relevant articles such as CINAHL, SCOPUS, PubMed, PsycINFO and MEDLINE. Twenty-one articles were included in this review. FINDINGS: New nurses perceived low to moderate levels of stress mainly from heavy workloads and lack of professional nursing competence. Individual and organizational factors that might contribute to their stress experiences were rarely explored. CONCLUSION: This integrative review evaluated and synthesized available evidence examining stress in new nurses and contributed to the literature regarding stress in nursing professionals. The findings of this review may offer specific information to nurse administrators that can relate to the stress encountered by new nurses who enter into healthcare facilities. IMPLICATIONS FOR NURSING AND HEALTH POLICY: Findings of this review may provide valuable input to assist nurse administrators in developing and implementing organizational measures to reduce stress in new nurses while maximizing and facilitating their integration into the nursing workforce. Such measures may include the following: establishment of a well-structured transition programme, provision of an adequate orientation and senior staff mentorship, stress management programmes, in-service educational programmes and exposure to clinical simulation scenarios.

Li, H., Cheng, B. et Zhu, X. P. (2018). "Quantification of burnout in emergency nurses: A systematic review and meta-analysis." *Int Emerg Nurs* **39**: 46-54.

BACKGROUND: Previous studies showed increased levels of absenteeism, drug abuse, depression, and symptoms allied with burnout in emergency nurses. This meta-analysis aimed to quantify the three dimensions of burnout in emergency nurses and estimate the proportion of nurses who experience higher than tolerable levels of burnout. MATERIALS AND METHODS: A systematic search was conducted on PubMed, Scielo, Xueshu Baidu and Informa databases with a cut-off time between 1997 and 2017 to retrieve published papers in any language that had estimated the burnout levels in emergency nurses by using MBI scale. RESULTS: We identified a total of 11 eligible studies. The total mean estimate was moderate for emotional exhaustion (25.552), but clearly trending towards higher level, whereas depersonalization (10.383) and lack of personal accomplishment (30.652) showed higher burnouts levels. The proportion of emergency nurses suffering from high emotional exhaustion, high depersonalization, and low personal accomplishment was 40.5%, 44.3%, and 42.7%, respectively. CONCLUSION: Burnout is detrimental to achieving high-quality healthcare services and causes a loss of productivity. It is high time for nursing leader and management personnel to identify appropriate measures to counteract burnout.

Moloney, W., Boxall, P., Parsons, M., et al. (2018). "Factors predicting Registered Nurses' intentions to leave their organization and profession: A job demands-resources framework." *J Adv Nurs* **74**(4): 864-875.

<https://onlinelibrary.wiley.com/doi/abs/10.1111/jan.13497>

Abstract Aims To develop a comprehensive model of nursing turnover intention by examining the effects of job demands, job resources, personal demands and personal resources on burnout and work engagement and subsequently on the intention to leave the organization and profession. **Background** The ageing population and a growing prevalence of multimorbidity are placing increasing strain on an ageing nursing workforce. Solutions that address the anticipated nursing shortage should focus on reducing burnout and enhancing the engagement of Registered Nurses (RNs) to improve retention. **Design** A cross-sectional survey design. **Method** Data were collected in 2014–2015 via an e-survey from 2,876 RNs working in New Zealand. Data were analysed with structural equation modelling. **Results** Higher engagement results in lower intention to leave the organization and profession. Burnout has significant effects on intentions to leave through lower engagement. While most of the demands and resources' variables (except professional development) have effects on intentions to leave, greater workload and greater work-life interference result in higher burnout and are the strongest predictors of intentions to leave. Greater emotional demands (challenges) and greater self-efficacy also have strong effects in lowering intentions to leave through higher engagement. **Conclusions** Employee burnout and work engagement play an important role in transmitting the impacts of job demands, job resources, personal demands and personal resources into RN intention to leave the organization and profession. Work-life interference and high workloads are major threats to nursing retention while challenge demands and higher levels of self-efficacy support better retention.

Monsalve-Reyes, C. S., San Luis-Costas, C., Gómez-Urquiza, J. L., et al. (2018). "Burnout syndrome and its prevalence in primary care nursing: a systematic review and meta-analysis." *BMC Fam Pract* **19**(1): 59.

BACKGROUND: burnout syndrome is a significant problem in nursing professionals. Although, the unit where nurses work may influence burnout development. Nurses that work in primary care units may be at higher risk of burnout. The aim of the study was to estimate the prevalence of emotional exhaustion, depersonalization and low personal accomplishment in primary care nurses. **METHODS:** We performed a meta-analysis. We searched Pubmed, CINAHL, Scopus, Scielo, Proquest, CUIDEN and LILACS databases up to September 2017 to identify cross-sectional studies assessing primary care nurses' burnout with the Maslach Burnout Inventory were included. The search was done in September 2017. **RESULTS:** After the search process, n = 8 studies were included in the meta-analysis, representing a total sample of n = 1110 primary care nurses. High emotional exhaustion prevalence was 28% (95% Confidence Interval = 22-34%), high depersonalization was 15% (95% Confidence Interval = 9-23%) and 31% (95% Confidence Interval = 6-66%) for low personal accomplishment. **CONCLUSIONS:** Problems such as emotional exhaustion and low personal accomplishment are very common among primary care nurses, while depersonalization is less prevalent. Primary care nurses are a burnout risk group.

Nourhashémi, F., Houles, M. et Chassaigne, M.-C. (2018). "Should I stay or should I go? Réflexion sur les leviers permettant la stabilité des équipes de soins." *Revue de Gériatrie*: pp.587-592.

Les différents rapports publiés montrent une augmentation régulière du taux de turnover des infirmières. Or, le maintien de la stabilité des équipes est un des piliers les plus importants qui permet de garantir une bonne qualité des soins en particulier à l'hôpital. Le turnover des équipes soignantes entraîne également des difficultés d'organisation et un surcoût certain pour les services de soin, et aggrave la pression subie par les équipes restantes. Ce manuscrit est une analyse des données de la littérature concernant les facteurs liés au turnover et aux arrêts de travail des infirmières. L'objectif de cet article est de permettre une réflexion sur les perspectives d'action pour améliorer la stabilité des équipes. (R.A.)

Pélissier, C., Charbotel, B., Fassier, J. B., et al. (2018). "Nurses' Occupational and Medical Risks Factors of Leaving the Profession in Nursing Homes." International Journal of Environmental Research and Public Health **15**(9).

This study aimed to evaluate the association between intention to leave work, and working conditions and health status among female care-staff in nursing homes. A multicenter cross-sectional study included female care-staff in 105 nursing homes for the elderly. We used validated questionnaires to assess occupational, psychosocial and medical data in a multicenter transverse study. Univariate analysis on chi² test was performed with stratification according to job (nurse, nursing assistant), and variables found to be significant on each dimension were included on multivariate models. 1428 nursing assistants and 342 registered nurses were included. 391 nursing assistants and 85 registered nurses intended to leave their work with the elderly. The registered nurses' intention to leave was associated with deteriorated care-team or residents relations, and with perceived elevated hardship due to the proximity of residents' death. The nursing assistants' intention to leave was associated with deteriorated management relation, with job insecurity and elevated hardship due to the residents' intellectual deterioration. Impaired physical or psychological health status also correlated with this intention. Policy to reduce voluntary turnover of care-staff in nursing homes for the elderly could be based on multifactorial management, acting on work organization and reducing psychosocial stress.

Petrelli, F., Scuri, S., Tanzi, E., et al. (2018). "Public health and burnout: a survey on lifestyle changes among workers in the healthcare sector." Acta Biomed **90**(1): 24-30.

Burnout Syndrome is a condition which could most commonly be associated with negative effects on the quality of work and life. Some occupations are more likely to suffer from this syndrome, for example workers in the health sector. This survey was therefore conducted among hospital workers of the Marche Region in order to analyze levels of Burnout and any possible correlation of these levels with lifestyle changes. METHODS: The survey was carried out using a self-administered, anonymous questionnaire in two sections: the first consisted of the Maslach Burnout Inventory (MBI) and the second contained questions about the healthcare operator's lifestyle. The MBI investigates levels of Emotional Exhaustion (EE), Depersonalization (DP) and finally of Personal Accomplishment (RP) in respondents. Survey results were processed using descriptive statistics, applying the Chi-square statistic and an Odds Ratio ($p < 0.05$). RESULTS: 53.4% of the questionnaire was duly completed. The scale with the highest incidence among interviewees was Depersonalization. Even though the high-level percentage for the DP and EE scale was equal to 22.3%, when adding the high-level percentage to the medium level percentage, the difference between low and medium-high level was found to be around 20% for all areas. Analyzing the correlation between lifestyle choices, and in particular the consumption of alcohol and smoking with Burnout Syndrome, a statistically significant Odds Ratio was observed in the DP scale vs alcohol (OR=4.67), the RP scale vs cigarette smoke (OR=2.50), and finally in the EE area vs cigarette smoke (OR=2.92). CONCLUSION: Our results are in line with other studies which show increasing levels of EE and DP in healthcare workers. Healthcare workers who have been in the same job for a considerable amount of time (15+ years) show the highest levels of EE and DP. Subjects with high levels of Depersonalization show a worrying exposure to alcohol abuse, while those with high levels of Emotional Exhaustion tend to make use of both alcohol and tobacco, demonstrating negative lifestyle choices; in spite of this, results for personal accomplishment being relatively low and therefore not cause for worry, subjects still show high levels of exposure to cigarette smoke.

Roelen, C. A. M., van Hoffen, M. F. A., Waage, S., et al. (2018). "Psychosocial work environment and mental health-related long-term sickness absence among nurses." J Nurs Manag **91**(2): 195-203.

PURPOSE: We investigated which job demands and job resources were predictive of mental health-related long-term sickness absence (LTSA) in nurses. METHODS: The data of 2059 nurses were obtained from the Norwegian survey of Shift work, Sleep and Health. Job demands (psychological demands, role conflict, and harassment at the workplace) and job resources (social support at work, role clarity, and fair leadership) were measured at baseline and linked to mental health-related LTSA during 2-year follow-up. Cox regression models estimated hazard ratios (HR) and related 95%

confidence intervals (CI). The c-statistic was used to investigate the discriminative ability of the Cox regression models. RESULTS: A total of 1533 (75%) nurses were included in the analyses; 103 (7%) of them had mental health-related LTSA during 2-year follow-up. Harassment (HR = 1.07; 95% CI 1.01-1.17) and social support (HR = 0.92; 95% CI 0.87-0.98) were associated with mental health-related LTSA. However, the Cox regression model did not discriminate between nurses with and without mental health-related LTSA (c = 0.59; 95% CI 0.53-0.65). CONCLUSIONS: Harassment was positively and social support at the workplace was negatively related to mental health-related LTSA, but both failed to discriminate between nurses with and without mental health-related LTSA during 2-year follow-up.

Tsaras, K., Daglas, A., Mitsi, D., et al. (2018). "A cross-sectional study for the impact of coping strategies on mental health disorders among psychiatric nurses." *Health Psychol Res* 6(1): 7466.

Several studies report that psychiatric nursing is a highly stressful occupation. The ways that nurses use in order to deal with stressful situations have a serious effect on their psychological mood and their health status. The purpose of this study was to investigate the coping strategies in predicting of depression and anxiety among mental health nurses working in public psychiatric hospitals. A descriptive, cross-sectional study was conducted in Athens, Greece from April to May 2017. A questionnaire consisting of the socio-demographic and work-related characteristics, the Patient Health Questionnaire-2, the Generalized Anxiety Disorder-2, and the 38-items Ways of Coping Questionnaire - Greek version, was completed by a total of 110 mental health nurses. Univariate and multivariate analyses were performed using the logistic regression model. Coping strategies focused on the problem (positive re-evaluation, positive approach, problem solving, and seeking social support) were the most commonly used by the mental health nurses. Strategies focused on emotion (prayer/daydream, prayer, avoidance/escape, resignation, and denial) were positively associated with depression and anxiety outcomes. Also, the coping skills of problem solving (Adjusted Odds Ratio, AOR=0.402), and seeking social support (AOR=3.719) were significant predictors only for elevated anxiety symptoms. The results from the study demonstrated the importance of coping behaviours in mental health problems of psychiatric nurses.

Brborović, H., Daka, Q., Dakaj, K., et al. (2017). "Antecedents and associations of sickness presenteeism and sickness absenteeism in nurses: A systematic review." *Int J Nurs Pract* 23(6).

AIMS: This study comprehensively analysed and systemized the elements associated with nursing sickness presenteeism (SP) and sickness absenteeism (SA). BACKGROUND: Both behaviours represent a real challenge to nursing departments because they can increase costs, cause health care adverse events, and impact the quality of health care. DESIGN: The systematic review of cohort studies was designed to be consistent with the PRISMA guidelines. DATA SOURCES: PubMed, ProQuest, and Emerald were systematically searched for peer-reviewed articles published from the 1950s to December 2016. REVIEW METHODS: Cohort studies were included (12 SA and 1 SP) in the review if they examined the association between one or more exposures and SP and/or SA in nurses. The methodological quality of the included studies was assessed using the Newcastle-Ottawa Scale. RESULTS: Twenty-three antecedents were associated with SA and grouped as work and organizational, mental and physical health, and demographic; 3 antecedents were associated with SP (job demands, burnout, and exhaustion). Exhaustion (fatigue) and job demands were associated with SA and SP. Depersonalization was an outcome of SP over time. CONCLUSION: The ability to predict presenteeism and absenteeism in nursing is useful to constrain costs and ensure that quality care is delivered.

Duhoux, A., Menear, M., Charron, M., et al. (2017). "Interventions to promote or improve the mental health of primary care nurses: a systematic review." *J Nurs Manag* 25(8): 597-607.

AIM: To synthesize the evidence on the effectiveness of interventions aiming to promote or improve the mental health of primary care nurses. BACKGROUND: Primary care nurses have been found to have high levels of emotional exhaustion and to be at increased risk of suffering from burnout, anxiety and depression. Given the increasingly critical role of nurses in high-performing primary care, there is

a need to identify interventions that can effectively reduce these professionals' mental health problems and promote their well-being. EVALUATION: We conducted a systematic review on the effectiveness of interventions at the individual, group, work environment or organizational level. KEY ISSUES: Eight articles reporting on seven unique studies met all eligibility criteria. They were non-randomized pre-post intervention studies and reported positive impacts of interventions on at least some outcomes, though caution is warranted in interpreting these results given the moderate-weak methodological quality of studies. CONCLUSIONS: This systematic review found moderate-weak evidence that primary, secondary and combined interventions can reduce burnout and stress in nurses practising in community-based health care settings. IMPLICATIONS FOR NURSING MANAGEMENT: The results highlight a need for the implementation and evaluation of new strategies tailored for community-based nurses practising in primary care.

Endsley, P. (2017). "School Nurse Workload: A Scoping Review of Acute Care, Community Health, and Mental Health Nursing Workload Literature." *Journal of School Nursing* **33**(1): 43-52.

The purpose of this scoping review was to survey the most recent (5 years) acute care, community health, and mental health nursing workload literature to understand themes and research avenues that may be applicable to school nursing workload research. The search for empirical and nonempirical literature was conducted using search engines such as Google Scholar, PubMed, CINAHL, and Medline. Twenty-nine empirical studies and nine nonempirical articles were selected for inclusion. Themes that emerged consistent with school nurse practice include patient classification systems, environmental factors, assistive personnel, missed nursing care, and nurse satisfaction. School nursing is a public health discipline and population studies are an inherent research priority but may overlook workload variables at the clinical level. School nurses need a consistent method of population assessment, as well as evaluation of appropriate use of assistive personnel and school environment factors. Assessment of tasks not directly related to student care and professional development must also be considered in total workload.

Gómez-Urquiza, J. L., Monsalve-Reyes, C. S., San Luis-Costas, C., et al. (2017). "[Risk factors and burnout levels in Primary Care nurses: A systematic review]." *Aten Primaria* **49**(2): 77-85.

OBJECTIVE: To determine the risk factors and levels of burnout in Primary Care nurses. METHODS: A systematic review was performed. DATA SOURCES: CINAHL, CUIDEN, LILACS, PubMed, ProQuest, ScienceDirect and Scopus databases were consulted. Search equations were 'burnout AND community health nursing' and 'burnout AND primary care nursing'. The search was performed in October 2015. STUDY SELECTION: The final sample was n=12 studies. Quantitative primary studies that used Maslach Burnout Inventory for burnout assessment in Primary Care nurses were included without restriction by publication date. DATA EXTRACTION: The main variables were the mean and standard deviation of the three burnout dimensions, high, medium and low prevalence rates of each dimension, and socio-demographic, occupational and psychological variables that potentially influence burnout level. RESULTS: Studies show high prevalence rates, generally between 23% and 31%, of emotional exhaustion. The prevalence rates of high depersonalisation and low personal accomplishment show heterogeneity, varying between 8%-32% and 4%-92% of the sample, respectively. Studies show that older nurses with more seniority, anxiety and depression, among other variables, have higher burnout levels, while nurses with higher salary, high job satisfaction, organisational support, and good self-concept have less burnout. CONCLUSION: High emotional exhaustion is the main affected dimension of burnout in Primary Care nursing. There is heterogeneity in depersonalisation and personal accomplishment. Burnout must be prevented in these professionals, by increasing protective factors and monitoring its appearance in those with risk factors.

Goodare, P. (2017). "Literature review: Why do we continue to lose our nurses?" *Australian Journal of Advanced Nursing, The* **34**(4): 50-56.
<https://www.ajan.com.au/archive/Vol34/Issue4/6Goodare.pdf>

Nurses encompass the largest professional constituent of the health care workforce in most countries, resulting in the impact of a shortage of these professionals, as immense. A projection in the shortage of nurses is upon us, and the margin in the reduction of these health professionals is thought to be worse than any of the preceding cyclical reductions. More than half of the nursing profession feel they are underpaid and overworked, resulting in the likelihood of patient's needs not being met, significantly increasing. Lengthy hours, quality of working environments, lack of leadership and the ageing population and workforce, can all be seen as influential factors, in which have the potential to leave this profession in a situation of calamity.

Halter, M., Boiko, O., Pelone, F., et al. (2017). "The determinants and consequences of adult nursing staff turnover: a systematic review of systematic reviews." *BMC Health Serv Res* **17**(1): 824.

BACKGROUND: Nurses leaving their jobs and the profession are an issue of international concern, with supply-demand gaps for nurses reported to be widening. There is a large body of existing literature, much of which is already in review form. In order to advance the usefulness of the literature for nurse and human resource managers, we undertook an overview (review of systematic reviews). The aim of the overview was to identify high quality evidence of the determinants and consequences of turnover in adult nursing. **METHODS:** Reviews were identified which were published between 1990 and January 2015 in English using electronic databases (the Cochrane Database of Systematic Reviews, MEDLINE, EMBASE, Applied Social Sciences Index and Abstracts, CINAHL plus and SCOPUS) and forward searching. All stages of the review were conducted in parallel by two reviewers. Reviews were quality appraised using the Assessment of Multiple Systematic Reviews and their findings narratively synthesised. **RESULTS:** Nine reviews were included. We found that the current evidence is incomplete and has a number of important limitations. However, a body of moderate quality review evidence does exist giving a picture of multiple determinants of turnover in adult nursing, with - at the individual level - nurse stress and dissatisfaction being important factors and -at the organisational level - managerial style and supervisory support factors holding most weight. The consequences of turnover are only described in economic terms, but are considered significant. **CONCLUSIONS:** In making a quality assessment of the review as well as considering the quality of the included primary studies and specificity in the outcomes they measure, the overview found that the evidence is not as definitive as previously presented from individual reviews. Further research is required, of rigorous research design, whether quantitative or qualitative, particularly against the outcome of actual turnover as opposed to intention to leave. **TRIAL REGISTRATION:** PROSPERO Registration 17 March 2015: CRD42015017613 .

Labrague, L. J., McEnroe-Petitte, D. M., Gloe, D., et al. (2017). "A literature review on stress and coping strategies in nursing students." *J Ment Health* **26**(5): 471-480.

BACKGROUND: While stress is gaining attention as an important subject of research in nursing literature, coping strategies, as an important construct, has never been comprehensively reviewed. **AIM:** The aims of this review were: (1) to identify the level of stress, its sources, and (2) to explore coping methods used by student nurses during nursing education. **METHODS:** This is a systematic review of studies conducted from 2000 to 2015 on stress and coping strategies in nursing students. CINAHL, MEDLINE, PsycINFO and PubMed were the primary databases for the search of literature. Keywords including "stress", "coping strategy", "nursing students" and "clinical practice" in 13 studies met the criteria. **FINDINGS:** Stress levels in nursing students range from moderate to high. Main stressors identified included stress through the caring of patients, assignments and workloads, and negative interactions with staff and faculty. Common coping strategies utilized by nursing students included problem-solving strategies such as developing objectives to resolve problems, adopting various strategies to solve problems, and finding the meaning of stressful events. **CONCLUSION:** Nurse educators may consider the use of formulation and implementation of empirically tested interventions to reduce stress while enhancing coping skills.

Morenon, O., Anaut, M. et Michallet, B. (2017). "Les caractéristiques des tuteurs de résilience des étudiants en soins infirmiers vulnérabilisés." *Recherche en soins infirmiers* **130**(3): 77-94.

<https://www.cairn.info/revue-recherche-en-soins-infirmiers-2017-3-page-77.htm>

La formation infirmière semble vulnérabiliser les étudiants, les conduisant parfois à souffrir de stress ou de burnout. Néanmoins, la majorité réussit cette formation. Cette reprise positive de l'apprentissage, malgré un contexte d'études parfois délétère, interroge sur le potentiel vulnérabilisant de cette scolarité, et sur de possibles mécanismes résilients favorisés entre autres par des tuteurs de résilience. Cet article de recherche en sciences de l'éducation commencera par une synthèse des résultats de publications sur les facteurs de stress voire de burnout de ces étudiants. Nous verrons en quoi cette scolarité peut être reliée au concept de vulnérabilité et de résilience. Nous présenterons ensuite les résultats et l'analyse thématique de 30 entretiens semi-directifs dont les objectifs ont été : de vérifier le potentiel vulnérabilisant de cette formation, de déterminer si des processus résilients peuvent être observés, et de cerner les caractéristiques des tuteurs de résilience de ces étudiants fragilisés. Après l'exposé des résultats et de l'analyse, nous discuterons des liens entre vulnérabilité, syndrome de stress post-traumatique et burnout. Nous approfondirons le concept de compassion comme l'un des attributs prédominants des tuteurs. Enfin, concernant la posture relationnelle de certains professionnels, nous verrons en quoi elle pourrait relever d'un accompagnement professionnel de la résilience.

Tahghighi, M., Rees, C. S., Brown, J. A., et al. (2017). "What is the impact of shift work on the psychological functioning and resilience of nurses? An integrative review." *J Adv Nurs* **73**(9): 2065-2083.

AIM: To synthesize existing research to determine if nurses who work shifts have poorer psychological functioning and resilience than nurses who do not work shifts. BACKGROUND: Research exploring the impact of shift work on the psychological functioning and resilience of nurses is limited compared with research investigating the impact of shifts on physical outcomes. DESIGN: Integrative literature review. DATA SOURCES: Relevant databases were searched from January 1995-August 2016 using the combination of keywords: nurse, shift work; rotating roster; night shift; resilient; hardiness; coping; well-being; burnout; mental health; occupational stress; compassion fatigue; compassion satisfaction; stress; anxiety; depression. REVIEW METHODS: Two authors independently performed the integrative review processes proposed by Whittemore and Knafl and a quality assessment using the mixed-methods appraisal tool by Pluye et al. RESULTS: A total of 37 articles were included in the review (32 quantitative, 4 qualitative and 1 mixed-methods). Approximately half of the studies directly compared nurse shift workers with non-shift workers. Findings were grouped according to the following main outcomes: (1) general psychological well-being/quality of life; (2) Job satisfaction/burnout; (3) Depression, anxiety and stress; and (4) Resilience/coping. We did not find definitive evidence that shift work is associated with poorer psychological functioning in nurses. Overall, the findings suggest that the impact of shift work on nurse psychological functioning is dependent on several contextual and individual factors. CONCLUSION: More studies are required which directly compare the psychological outcomes and resilience of nurse shift workers with non-shift workers.

Zimmermann, J.-F. (2017). "QVT et GHT : Quelle approche pertinente pour escompter prendre soin des professionnels de santé ?" *Gestions Hospitalières*(569): 481-485.

[BDSP. Notice produite par EHESP F7R0xjrp. Diffusion soumise à autorisation]. La qualité de vie au travail est un concept dominant dans l'entreprise depuis quelques années. Qu'en est-il pour les professionnels de santé à l'hôpital, notamment dans le contexte des groupements hospitaliers de territoire (GHT) instaurés par la loi 2016 de modernisation de notre système de santé ? Quelle démarche d'accompagnement pour passer du management déjà ardu du personnel non médical (PNM) d'un hôpital à leur intégration pour certains dans une organisation complexe de GHT ? Comment prendre soin des cadres au cœur du flux des demandes croisées des différents acteurs internes ?

Addor, V., Schwendimann, R., Gauthier, J.-A., et al. (2016). "L'étude nurses at work :parcours professionnels des infirmières/infirmiers au cours des 40 dernières années en Suisse." *Obsan Bulletin*(8).

https://arodes.hes-so.ch/record/9198/files/2016_Paignon_Etude_Nurse_at_Work.pdf

https://www.obsan.admin.ch/sites/default/files/2021-08/obsan_bulletin_2016-08_f.pdf

Il est démontré qu'une pénurie de personnel soignant a des effets défavorables sur la qualité des soins et qu'il en résulte une hausse de la morbidité et de la mortalité chez les patientes et les patients. Comment la Suisse peut-elle se procurer à moyen terme, et malgré le vieillissement de la population, le personnel soignant dont elle a besoin. Des informations de base sur cette question sont indispensables. Combien d'infirmières demeurent fidèles à leur profession pendant toute leur vie active. Pourquoi certaines abandonnent-elles le métier. L'étude nurses at work s'est attachée à déterminer les raisons qui poussent les unes à rester, les autres à quitter le secteur de la santé. Elle indique des pistes pour inciter les infirmières à demeurer dans le secteur de la santé. Il s'est avéré très difficile, malgré de gros efforts, de contacter les infirmières ayant abandonné leur activité dans le secteur de la santé, et il faut bien constater aujourd'hui que ce groupe de personnes représente une faible proportion des répondantes à l'étude. Les données du relevé structurel de l'Office fédéral vont dans les mêmes sens. Les résultats de l'étude nurses at work n'en restent pas moins très utiles sur le plan qualitatif. Il convenait donc de les publier et de les rendre accessibles notamment aux instances chargées de la planification du personnel de santé. L'étude renseigne sur certains aspects de la profession dont il faut tenir compte dans le contexte des efforts qui sont menés pour maintenir le plus possible de personnel soignant dans le secteur de la santé.

Barlet, M., Dupilet, C., Richard, T., et al. (2016). "Portrait des professionnels de santé." Paris Drees <http://drees.social-sante.gouv.fr/etudes-et-statistiques/publications/documents-de-travail/serie-etudes-et-recherche/article/portrait-des-professionnels-de-sante>

[BDSP. Notice produite par MIN-SANTE R0xknpr8. Diffusion soumise à autorisation]. Au travers de fiches pédagogiques et synthétiques, cet ouvrage fournit un état des lieux inédit sur les 1,9 millions de professionnels de santé qui exercent en France. Il livre les chiffres clés sur les différents aspects des métiers et des parcours des professionnels de santé. Les deux premières parties dressent un panorama de la profession, ses évolutions et les spécificités des différents exercices puis ses rémunérations selon le mode d'exercice, le métier ou la spécialité exercés. La formation fait l'objet d'une troisième partie. Une dernière partie esquisse les tendances des futures évolutions démographiques et examine la répartition des professionnels telle qu'elle pourrait se dessiner sur le territoire.

Cœugnet, S., Forrierre, J., Naveteur, J., et al. (2016). "Time pressure and regulations on hospital-in-the-home (HITH) nurses: An on-the-road study." *Appl Ergon* **54**: 110-119.

This study investigated both causal factors and consequences of time pressure in hospital-in-the-home (HITH) nurses. These nurses may experience additional stress from the time pressure they encounter while driving to patients' homes, which may result in greater risk taking while driving. From observation in natural settings, data related to the nurses' driving behaviours and emotions were collected and analysed statistically; semi-directed interviews with the nurses were analysed qualitatively. The results suggest that objective time constraints alone do not necessarily elicit subjective time pressure. The challenges and uncertainty associated with healthcare and the driving period contribute to the emergence of this time pressure, which has a negative impact on both the nurses' driving and their emotions. Finally, the study focuses on anticipated and in situ regulations. These findings provide guidelines for organizational and technical solutions allowing the reduction of time pressure among HITH nurses.

Fontana, L., Giurgiu, D. I., Jeoffrion, C., et al. (2016). "Wellbeing and occupational risk perception among health care workers: a multicenter study in Morocco and France." *Int J Environ Res Public Health* **11**: 20.

BACKGROUND: The study analyzes health care workers' (HCWs) occupational risk perception and compares exposure to occupational risk factors in Moroccan and French hospitals. METHOD: Across nine public hospitals from three Moroccan regions (north, center and south), a 49 item French questionnaire, based on the Job Content Questionnaire, and 4 occupational risks subscales, was

distributed to 4746 HCWs. Internal consistency of the study was determined for each subscale. Confirmatory factor analysis was conducted on the Moroccan questionnaire. Psychosocial job demand, job decision latitude and social support scores analysis was used to isolate high strain jobs. Occupational risks and high strain perception correlation were analyzed by univariate and multivariate logistic regression. A comparative analysis between Moroccan and French (Nantes Hospitals) investigations data was performed. RESULTS: In Morocco, 2863 HCWs (60 %) answered the questionnaire (54 % women; mean age 40 years; mean work seniority 11 years; 24 % physicians; 45 % nurses). 44 % Moroccan HCWs are at high strain. Casablanca region (1.75 OR; CI: 1.34-2.28), north Morocco (1.66 OR; CI: 1.27-2.17), midwives (2.35 OR; 95 % CI 1.51-3.68), nursing aides (1.80 OR; 95 % CI: 1.09-2.95), full-time employment (1.34 OR; 95 % CI 1.06-1.68); hypnotics, sedatives use (1.48 OR; 95 % CI 1.19-1.83), analgesics use (1.40 OR; 95 % CI 1.18-1.65) were statistically associated to high strain. 44% Moroccan HCWs are at high strain versus 37 % French (Nantes) HCWs ($p < 0.001$). CONCLUSION: Moroccan HCWs have high strain activity. Moroccan HCWs and more Moroccan physicians are at high strain than Nantes HCWs. Moroccan and French's results showed that full time workers, midwives, workers using hypnotics, and analgesics are at high strain. Our findings underscore out the importance of implementing a risk prevention plan and even a hospital reform. Further research, with an enlarged study pool will provide more information on psychosocial risks (PSR) and HCWs' health.

Freimann, T. (2016). "Work-Related Psychosocial Factors and Mental Health Problems Associated with Musculoskeletal Pain in Nurses: A Cross-Sectional Study." *Med Sci (Basel)* **2016**: 9361016.

Background. Musculoskeletal pain is the most common cause of incapacity among nurses. This study aimed to report the prevalence of musculoskeletal pain among hospital nurses and to explore the associations of work-related psychosocial factors and mental health problems with musculoskeletal pain. Methods. A cross-sectional survey was carried out among registered nurses at Tartu University Hospital during April and May 2011. Binary logistic regression was used to assess the associations between dependent and independent variables. Results. Analysis was based on 404 nurses (45% of the hospital's nursing population). The overall prevalence of MSP was 70% in the past year and 64% in the past month. Lower back (57%) and neck (56%) were the body areas most commonly painful in the past year. Higher quantitative and emotional demands, work pace, low justice and respect in the workplace, influence on work organisation, and role conflicts were significantly associated with musculoskeletal pain among nurses ($p < 0.05$). All mental health problems and most strongly somatic stress symptoms were associated with musculoskeletal pain. Conclusions. Work-related psychosocial risk factors and mental health problems, especially somatic stress symptoms, have an important impact on the occurrence of musculoskeletal pain among university hospital nurses.

Hjorth, C. F., Bilgrav, L., Frandsen, L. S., et al. (2016). "Mental health and school dropout across educational levels and genders: a 4.8-year follow-up study." *BMC public health* **16**(1): 976.
<https://doi.org/10.1186/s12889-016-3622-8>

Education is a key determinant of future employment and income prospects of young people. Poor mental health is common among young people and is related to risk of dropping out of school (dropout). Educational level and gender might play a role in the association, which remains to be studied.

Karatza, C., Zyga, S., Tziaferi, S., et al. (2016). "Workplace bullying and general health status among the nursing staff of Greek public hospitals." *Annals of general psychiatry* **15**(1): 1-7.

Liu, Y., Aunguroch, Y. et Yunibhand, J. (2016). "Job satisfaction in nursing: a concept analysis study." *Int Nurs Rev* **63**(1): 84-91.

Aim This study aims to undertake a concept analysis of job satisfaction in the nursing profession. Background Around current global shortage of nurses, it is important to stabilize the nursing workforce. Nurses' job satisfaction has been found to be related to intention to leave. Introduction In

the nursing profession, there is a lack of evidence to support the attributes of nurses' job satisfaction. Methods Walker and Avant's approach of concept analysis was used. Results The main attributes of job satisfaction from this study are (1) fulfillment of desired needs within the work settings, (2) happiness or gratifying emotional responses towards working conditions, and (3) job value or equity. These attributes are influenced by antecedent conditions like demographic, emotional, work characteristics and environmental variables. Additionally, the consequences of nurses' job satisfaction have a significant impact on both nurses and patients. Discussion This study integrated both the content and process of motivational theories to generate the attributes of job satisfaction in nursing that overcome the limitation of the previous studies, which looked only at the definitions of nurses' job satisfaction based on content motivational theories. Conclusion and Implications for Nursing and Health Policy The findings of this study can facilitate both nursing researchers to develop a cultural adaption instrument and policy makers to improve clinical nursing practice. This analysis provides nurse managers with a new perspective to deal with nurses' job satisfaction by taking into account all the attributes that influence it in the nursing field.

Machado, T., Desrumaux, P. et Van Droogenbroeck, A. (2016). "Indicateurs organisationnels et individuels du bien-être. Étude exploratoire auprès d'aides-soignants et d'infirmiers." *Bulletin de psychologie* Numéro 541(1): 19-34.

<https://www.cairn.info/revue-bulletin-de-psychologie-2016-1-page-19.htm>

Le secteur médical est exposé à des contraintes fortes, que les contrats locaux d'amélioration des conditions de travail (CLACT) visent à compenser. L'étude identifie des indicateurs de bien-être auprès d'infirmiers et d'aides-soignants (N= 36, âge moyen 32 ans), à l'aide d'un questionnaire diffusé en ligne. Les analyses ($p < .01$) montrent que le bien-être est corrélé au besoin d'affiliation ($r=0,45$), à l'attachement ($r=0,61$), à l'intégration sociale ($r=0,42$), aux affects positifs ($r=0,47$) et au soutien ($r=0,35$). Les régressions multiples identifient les affects positifs ($\beta=0,39$) et l'attachement ($\beta=0,44$) comme variables les plus explicatives. Ces résultats montrent l'importance de la dimension relationnelle qu'un espace spatio-temporel, permettant au collectif de travail d'exister, favorisera.

Roso-Bas, F., Jimenez, A. P. et Garcia-Buades, E. (2016). "Emotional variables, dropout and academic performance in Spanish nursing students." *Nurse Educ Today* 37: 53-58.

The dropout of university studies is a main concern in many countries, also for Health Sciences degrees. The reviews on dropout in all university degrees as well as nursing generally show multidimensional causes with factors related both to institutional and students' characteristics. Regarding the personal variables of students, researchers have focused on financial, family and personality features. Far less attention has been devoted to emotional variables. This study aims to explore whether individual variables of the emotional domain such as perceived emotional intelligence, dispositional optimism/pessimism and depressive rumination are related and/or can predict students' intention to dropout and academic performance. Using a cross-correlational approach, data were obtained from a sample of 144 nursing students. Students with a pessimistic disposition revealed a greater tendency to drop out. The remaining variables correlated significantly with pessimism but had no predictive value on dropout. Our results suggest that students with low levels of emotional clarity and repair and high depressive rumination have pessimistic expectations, so they are more likely to leave studies. No significant results were found in relation to academic performance. We conclude with an identification of strategies to increase retention and academic success. (C) 2015 Elsevier Ltd. All rights reserved.

Sarafis, P., Rousaki, E., Tsounis, A., et al. (2016). "The impact of occupational stress on nurses' caring behaviors and their health related quality of life." *BMC Nurs* 15: 56.

BACKGROUND: Nursing is perceived as a strenuous job. Although past research has documented that stress influences nurses' health in association with quality of life, the relation between stress and caring behaviors remains relatively unexamined, especially in the Greek working environment, where it is the first time that this specific issue is being studied. The aim was to investigate and explore the

correlation amidst occupational stress, caring behaviors and their quality of life in association to health. METHODS: A correlational study of nurses (N = 246) who worked at public and private units was conducted in 2013 in Greece. The variables were operationalized using three research instruments: (1) the Expanded Nursing Stress Scale (ENSS), (2) the Health Survey SF-12 and (3) the Caring Behaviors Inventory (CBI). Univariate and multivariate analyses were performed. RESULTS: Contact with death, patients and their families, conflicts with supervisors and uncertainty about the therapeutic effect caused significantly higher stress among participants. A significant negative correlation was observed amidst total stress and the four dimensions of CBI. Certain stress factors were significant and independent predictors of each CBI dimension. Conflicts with co-workers was revealed as an independent predicting factor for affirmation of human presence, professional knowledge and skills and patient respectfulness dimensions, conflicts with doctors for respect for patient, while conflicts with supervisors and uncertainty concerning treatment dimensions were an independent predictor for positive connectedness. Finally, discrimination stress factor was revealed as an independent predictor of quality of life related to physical health, while stress resulting from conflicts with supervisors was independently associated with mental health. CONCLUSION: Occupational stress affects nurses' health-related quality of life negatively, while it can also be considered as an influence on patient outcomes.

Vasconcelos, S. C., de Souza, S. L., Sougey, E. B., et al. (2016). "Nursing staff members mental's health and factors associated with the work process: an integrative review." Clinical practice and epidemiology in mental health: CP & EMH **12**: 167.

Background: The mental health of nursing staff members influences the work process outcomes. Objective: Identify the work related factors that harms the nursing team's mental health. Methods: Databases PubMed, Scopus, CINAHL and MEDLINE, by mating between the indexed descriptors in MeSH terms "mental health" and "occupational health nursing". 783 articles were rescued to give a final sample of 18 articles. Integrative review in order to identify factors associated with the work process of the nursing staff that negatively affects mental health. Results: The main associated factors were work demands, psychological demands, violence, aggression, poor relationships with administrators, accidents involving the risk of exposure to HIV, stress and errors in the execution of labor activities. The main findings regarding the nursing staff's mental health were post-traumatic stress disorder, depression, stress, major depressive episode and generalized anxiety disorder. Conclusion: Occupational nurses need to understand the complexities of mental health problems and substance use among nursing staff members to recognize, identify and care for workers at risk and offer adequate mental health care. Although the researches interests in this theme have increased, proving that all these factors contribute to the risk to mental health of nursing professionals, the protective measures and care are being neglected by managers in both private and public network . The health of nursing workers in question here is one more challenge for a profession that takes care of others in need, therefore, requires some caring with their own health.

Adriaenssens, J., De Gucht, V. et Maes, S. (2015). "Determinants and prevalence of burnout in emergency nurses: a systematic review of 25 years of research." Int J Nurs Stud **52**(2): 649-661.

BACKGROUND: Burnout is an important problem in health care professionals and is associated with a decrease in occupational well-being and an increase in absenteeism, turnover and illness. Nurses are found to be vulnerable to burnout, but emergency nurses are even more so, since emergency nursing is characterized by unpredictability, overcrowding and continuous confrontation with a broad range of diseases, injuries and traumatic events. OBJECTIVES: This systematic review aims (1) to explore the prevalence of burnout in emergency nurses and (2) to identify specific (individual and work related) determinants of burnout in this population. METHOD: A systematic review of empirical quantitative studies on burnout in emergency nurses, published in English between 1989 and 2014. DATA SOURCES: The databases NCBI PubMed, Embase, ISI Web of Knowledge, Informa HealthCare, Picarta, Cinahl and Scielo were searched. RESULTS: Seventeen studies were included in this review. On average 26% of the emergency nurses suffered from burnout. Individual factors such as demographic variables, personality characteristics and coping strategies were predictive of burnout. Work related factors such

as exposure to traumatic events, job characteristics and organizational variables were also found to be determinants of burnout in this population. CONCLUSIONS: Burnout rates in emergency nurses are high. Job demands, job control, social support and exposure to traumatic events are determinants of burnout, as well as several organizational variables. As a consequence specific action targets for hospital management are formulated to prevent turnover and burnout in emergency nurses.

Coventry, T. H., Maslin-Prothero, S. E. et Smith, G. (2015). "Organizational impact of nurse supply and workload on nurses continuing professional development opportunities: an integrative review." *J Adv Nurs* **71**(12): 2715-2727.

Aim. To identify the best evidence on the impact of healthcare organizations' supply of nurses and nursing workload on the continuing professional development opportunities of Registered Nurses in the acute care hospital. Background. To maintain registration and professional competence nurses are expected to participate in continuing professional development. One challenge of recruitment and retention is the Registered Nurse's ability to participate in continuing professional development opportunities. Design. The integrative review method was used to present Registered Nurses perspectives on this area of professional concern. Data sources. The review was conducted for the period of 2001-February 2015. Keywords were: nurs*, continuing professional development, continuing education, professional development, supply, shortage, staffing, workload, nurse: patient ratio, barrier and deterrent. Review methods. The integrative review used a structured approach for literature search and data evaluation, analysis and presentation. Eleven international studies met the inclusion criteria. Results. Nurses are reluctant or prevented from leaving clinical settings to attend continuing professional development due to lack of relief cover, obtaining paid or unpaid study leave, use of personal time to undertake mandatory training and organizational culture and leadership issues constraining the implementation of learning to benefit patients. Conclusion. Culture, leadership and workload issues impact nurses' ability to attend continuing professional development. The consequences affect competence to practice, the provision of safe, quality patient care, maintenance of professional registration, job satisfaction, recruitment and retention. Organizational leadership plays an important role in supporting attendance at continuing professional development as an investment for the future.

Khamisa, N., Oldenburg, B., Peltzer, K., et al. (2015). "Work Related Stress, Burnout, Job Satisfaction and General Health of Nurses." *Int J Environ Res Public Health* **12**(1): 652-666.
<https://www.mdpi.com/1660-4601/12/1/652>

Gaps in research focusing on work related stress, burnout, job satisfaction and general health of nurses is evident within developing contexts like South Africa. This study identified the relationship between work related stress, burnout, job satisfaction and general health of nurses. A total of 1200 nurses from four hospitals were invited to participate in this cross-sectional study (75% response rate). Participants completed five questionnaires and multiple linear regression analysis was used to determine significant relationships between variables. Staff issues are best associated with burnout as well as job satisfaction. Burnout explained the highest amount of variance in mental health of nurses. These are known to compromise productivity and performance, as well as affect the quality of patient care. Issues, such as security risks in the workplace, affect job satisfaction and health of nurses. Although this is more salient to developing contexts it is important in developing strategies and intervention programs towards improving nurse and patient related outcomes.

Loriol, M. (2015). "La souffrance au travail. Construction de la catégorie et mise en forme de l'expérience." *Pensée plurielle* **38**(1): 23-33.
<https://www.cairn.info/revue-pensee-plurielle-2015-1-page-23.htm>

La souffrance au travail est devenue un sujet de préoccupation et d'étude dès les années 1980, avant même que le stress et les risques psychosociaux (RPS) ne propulsent sur l'agenda médiatique et politique les questions de santé mentale au travail. Le thème de la souffrance, par rapport à ces nouvelles mises en forme du malaise au travail, possède à la fois une dimension psychologique très

personnelle et une dimension sociale critique. Comment s'articulent ces deux dimensions ? Après avoir rappelé les débats et les enjeux liés à la signification et aux usages (politiques, sociaux, syndicaux, etc.) du mot « souffrance » dans l'univers professionnel, cet article s'intéressera aux discours et à l'expérience de la souffrance de soignantes hospitalières.

Maillard, C. (2015). "“Ras la seringue”, le premier conflit infirmier." *Les Tribunes de la santé* 46(1): 43-48.
<https://www.cairn.info/revue-les-tribunes-de-la-sante1-2015-1-page-43.htm>

Auteur de *Infirmière, la passion de l'hôpital*, Michelle Bressand, cadre infirmier « faisant partie de cette communauté infirmière engagée qui surveillait l'évolution de la profession » en 1988, avant de devenir par la suite la première infirmière inspectrice générale de la santé, a témoigné de sa participation à ce conflit – « l'ayant beaucoup suivi, voire, dit-elle, un peu encouragé » – lors de la première conférence du cycle 2014 de la Chaire santé de Sciences Po dont on lira ici le compte rendu. À l'annonce du décret Barzach, qui permettait aux non-bacheliers de présenter le concours d'entrée à l'école d'infirmières, cette contestation, déclenchée par la Coordination nationale des infirmières et soutenue par les cadres infirmiers, a mis en lumière combien les autorités sanitaires étaient en décalage avec cette profession, « donnant l'impression de n'avoir rien compris à son évolution ».

Nowrouzi, B., Lightfoot, N., Larivière, M., et al. (2015). "Occupational Stress Management and Burnout Interventions in Nursing and Their Implications for Healthy Work Environments: A Literature Review." *Workplace Health Saf* 63(7): 308-315.

This article reports on a literature review of workplace interventions (i.e., creating healthy work environments and improving nurses' quality of work life [QWL]) aimed at managing occupational stress and burnout for nurses. A literature search was conducted using the keywords nursing, nurses, stress, distress, stress management, burnout, and intervention. All the intervention studies included in this review reported on workplace intervention strategies, mainly individual stress management and burnout interventions. Recommendations are provided to improve nurses' QWL in health care organizations through workplace health promotion programs so that nurses can be recruited and retained in rural and northern regions of Ontario. These regions have unique human resources needs due to the shortage of nurses working in primary care.

Pélissier, C., Fontana, L., Fort, E., et al. (2015). "Impaired mental well-being and psychosocial risk: a cross-sectional study in female nursing home direct staff." *BMJ Open* 5(3): e007190.

OBJECTIVES: The present study sought to quantify the impaired mental well-being and psychosocial stress experienced by nursing home staff and to determine the relationship between impaired mental well-being assessed on the 12-item General Health Questionnaire (GHQ-12) and exposure to psychosocial stress assessed on Siegrist's effort/reward and overcommitment model. **METHODS:** A transverse study was conducted in France on 2471 female employees in 105 nursing homes for the elderly. Personal and occupational data were collected by questionnaire for 668 housekeepers, 1454 nursing assistants and 349 nurses. **RESULTS:** 36.8% of participants (n=896) showed impaired mental well-being, 42.7% (n=1039) overcommitment and 9% (n=224) effort/reward imbalance. Overcommitment (prevalence ratio (PR)=1.27; 95% CI (1.21 to 1.34)) and effort-reward imbalance (PR=1.19; 95% CI (1.12 to 1.27)) were significantly associated with presence of impaired mental well-being after adjustment for personal factors (age and private life events). Taking effort and reward levels into account, the frequency of impaired mental well-being was highest in case of exposure to great extrinsic effort and low rewards of any type: esteem, PR=3.53, 95% CI (3.06 to 4.08); earnings, PR=3.48, 95% CI (2.99 to 4.06); or job security, PR=3.30, 95% CI (2.88 to 3.78). Participants in situations of overcommitment and of effort/reward imbalance were at the highest risk of impaired mental well-being: PR=3.86, 95% CI (3.42 to 4.35). **CONCLUSIONS:** Several changes in nursing home organisation can be suggested to reduce staff exposure to factors of psychosocial stress. Qualitative studies of the relation between impaired mental well-being and psychosocial stress in nursing home staff could guide prevention of impaired mental well-being at work.

Perry, L., Lamont, S., Brunero, S., et al. (2015). "The mental health of nurses in acute teaching hospital settings: a cross-sectional survey." *BMC Nurs* **14**: 1-8.

Philip, P., Micoulaud-Franchi, J. A., Pélissier, C., et al. (2015). "Risk factors for work-related stress and subjective hardship in health-care staff in nursing homes for the elderly: A cross-sectional study." *J Clin Med* **57**(3): 285-296.

OBJECTIVES: This study aimed to explore potential risk factors for work-related stress by, detailing working conditions and subjective hardship according to occupational category in health-care staff working with elderly patients. **METHODS:** A cross-sectional descriptive survey was conducted in 105 nursing homes for the elderly in France. Data on nursing home working conditions were collected by occupational physicians. The study population was limited to those in direct contact with the elderly, who were divided into 3 occupational groups defined by qualifications and tasks: housekeepers (HKs), nursing assistants (NAs) and nurses (Ns). Employees answered a questionnaire on their perceived working conditions and vocational training courses. Psychosocial stress was assessed with the Siegrist questionnaire. **RESULTS:** The subjects included 706 HKs, 1,565 NAs and 378 Ns, and the findings showed confusion of tasks and responsibilities in the study population. Verbal abuse by residents was reported by 60.9% of HKs (versus 76.2% of NAs and 76.7% of Ns, $p < 0.001$). Physical attack by residents was more frequently reported by NAs (59.1%) than Ns (52.8%) or HKs (38.0%) ($p < 0.001$). Nearly 10% of employees reported clear effort/reward imbalance (10.4% of NAs, 9.2% of Ns and 7.0% of HKs, $p = 0.059$). Great hardship related to proximity to death was reported by 40.5% of HKs (versus 37.3% of NAs and 22.6% of Ns; $p < 0.001$). **CONCLUSIONS:** To prevent stress related to insufficient ability, nursing home workers should be encouraged to attend job training courses, which should cover knowledge of the specific care needs of elderly patients and of the authority/responsibility required to do their job.

Platis, C., Reklitis, P. et Zimeras, S. (2015). "Relation between Job Satisfaction and Job Performance in Healthcare Services." *Procedia - Social and Behavioral Sciences* **175**: 480-487.

<https://www.sciencedirect.com/science/article/pii/S1877042815012860>

In an environment of tension and division of labor such as Healthcare Services, the performance of employees is one of the most basic challenges. The reason is that performance as a phenomenon is closely related to aspects of effectiveness, knowledge management and quality from one side and to management, financing and development of the organization from the other. Especially for doctors and nurses performance issues are inextricably linked to patient safety. The international literature shows that a large number of factors influence employee performance such as satisfaction from the profession, work environment, compensation policies, etc. In this work we try to analyze the relationship between job satisfaction and job performance. The analysis takes place in the National Centre of Public Administration and Local Government during the training process, where a questionnaire with 7-Likert scale is distributed to 246 personnel (nurses). The analysis is taking place between job satisfaction parameters versus self-job performance parameters. Principal components analysis suggests that for job satisfaction the most important parameters are (based on their weights): satisfaction from manager (weight=0.703), satisfaction from manager administration (weight=0.732), satisfaction of ways of working (weight=0.657), satisfaction of recognition (weight=0.627), satisfactory of working hours (weight=0.695) and satisfactory of working security (weight=0.707). For the self - job performance most important parameters are (based on their weights): self-satisfaction of quantity of work (weight=0.896), self-satisfaction of productivity (weight=0.878), self-satisfaction of initiatives (weight=0.794), self-satisfaction of working targets (weight=0.766), and self-satisfaction of quality improvements (weight=0.792).

Spinhirny, F. (2015). "La fatigue de compassion : L'hospitalité en question." *Gestions Hospitalières*(546): 271-274

[BDSP. Notice produite par EHESP tR0x7sjB. Diffusion soumise à autorisation]. Une nouvelle notion émerge dans le champ sanitaire et social, précisant les relations entre charge de travail, perte de sens, effort affectif et épuisement professionnel : l'usure ou fatigue de compassion. Celle-ci développe un

rapport particulier entre le soignant, l'accompagnant ou tout salarié, et l'autre, celui dont il est responsable. Mais derrière une innovation conceptuelle bien commode pour apprécier les modes de travail marqués par l'individualisme, la fatigue de compassion questionne la valeur même de l'hospitalité, voire l'action altruiste elle-même. (introd.).

Tuckett, A., Winters-Chang, P., Bogossian, F., et al. (2015). "Why nurses are leaving the profession ... lack of support from managers': What nurses from an e-cohort study said." *Int J Nurs Pract* **21**(4): 359-366.

The shortage of nurses is known. We explored nurses' reasons for leaving the profession based on responses from an e-newsletter of the Nurses and Midwives e-cohort Study. Qualitative content analysis of data from email responses (n = 66) showed 'Lack of support' as a social work value describing their manager's lack of support, unsupportive relationships within their work group, and a health-care system putting business principles before care resulting in job dissatisfaction and nurse turnover. These findings are examples of a 'complex'/'wicked' problem and as such will resist simple solutions to the presenting issues. The dialogic process such as Open Space Technology and Talking Circles should be considered as potentially suitable to the needs of nurses.

Wu, L. T., Low, M. M., Tan, K. K., et al. (2015). "Why not nursing? A systematic review of factors influencing career choice among healthcare students." *Int Nurs Rev* **62**(4): 547-562.

BACKGROUND: A global shortage of healthcare professionals calls for effective recruitment and retention strategies. The nursing profession faces greater staffing shortages compared with other healthcare professions. Identifying these factors for choosing a career in health care is an important step in structuring future nursing recruitment strategies. **AIM:** This systematic review examined the motivations for choosing a career in health care, then compared them to factors that influence the choice to pursue a career in nursing. **METHODS:** A literature search of the CINAHL, PubMed, Web of Science and Scopus databases for articles published between 2002 and 2013 was conducted. The search included studies that focused on factors influencing career choice among undergraduate medicine, dentistry, pharmacy and nursing students. **RESULTS:** A total of 29 papers were included in the review. The themes and subthemes that emerged from this review included: (1) intrinsic factors, including a desire to help others and a personal interest in health care, (2) extrinsic factors, such as financial remuneration, job security, professional prestige and job autonomy, (3) socio-demographic factors such as gender and socio-economic status, and (4) interpersonal factors, encompassing the influence of family and other professional individuals. **DISCUSSION:** Healthcare professionals were generally motivated by intrinsic factors. However, public perceptions of nursing as a low-paying and low-status job have significantly hindered the participants' choice to pursue it as a career. **CONCLUSION AND IMPLICATIONS FOR NURSING AND/OR HEALTH POLICY:** Nursing institutions could provide more platforms to help school leavers better understand the nursing career. In turn, hospital administrators could invite parents to nursing career fairs, increase financial remuneration for nurses, and provide decision-making avenues aimed at recruiting and retaining more nurses.

Boivin-Desrochers, C. et Alderson, M. (2014). "Les difficultés/souffrances vécues par les infirmières : stratégies permettant de préserver leur santé mentale, leur sens au travail et leur performance au travail." *Recherche en soins infirmiers* **118**(3): 85-96.
<https://www.cairn.info/revue-recherche-en-soins-infirmiers-2014-3-page-85.htm>

La profession infirmière est aux prises avec un enjeu de plus en plus préoccupant, soit celui de la santé mentale du personnel infirmier. Les nombreuses difficultés que vivent les infirmières et les infirmiers dans leur milieu de travail peuvent s'avérer être néfastes au maintien d'un état mental optimal. À l'égard de ces souffrances, plusieurs stratégies peuvent être déployées et utilisées par le personnel infirmier et les gestionnaires. Cette présente recension d'écrits vise à faire le point sur les difficultés et souffrances vécues par le personnel infirmier et les stratégies employées pour assurer la préservation d'une santé mentale, d'un sens et d'une performance au travail. Elle vise également à offrir au personnel infirmier et aux gestionnaires du système de la santé des pistes de réflexion permettant de favoriser une santé mentale optimale du personnel infirmier. En ce sens, la psychodynamique du

travail a été retenue comme cadre de référence pour structurer l'analyse des écrits traitant des éléments entourant les souffrances et les difficultés expérimentées par le personnel infirmier. L'emploi de ce cadre théorique a permis d'approfondir et de soutenir les relations entre les souffrances expérimentées au travail et la santé mentale du personnel infirmier.

Dares (2014). "Le travail de nuit en 2012." *Dares Analyses*(062)

<http://travail-emploi.gouv.fr/IMG/pdf/2014-062.pdf>

En 2012, 15,4 % des salariés (21,5 % des hommes et 9,3 % des femmes), soit 3,5 millions de personnes, travaillent la nuit, habituellement ou occasionnellement. C'est un million de salariés de plus qu'en 1991, l'augmentation étant particulièrement forte pour les femmes. Le travail de nuit est le plus répandu dans le tertiaire : il concerne 30 % des salariés dans la fonction publique et 42 % dans les entreprises privées de services. Conducteurs de véhicules, policiers et militaires, infirmières, aides-soignantes et ouvriers qualifiés des industries de process sont les cinq familles professionnelles les plus concernées par le travail de nuit. Les intérimaires, les hommes trentenaires et les femmes de moins de 30 ans travaillent plus fréquemment la nuit. À autres caractéristiques comparables, les salariés qui travaillent la nuit ont une rémunération plus élevée mais des conditions de travail nettement plus difficiles que les autres salariés : ils sont soumis à des facteurs de pénibilité physique plus nombreux, une pression temporelle plus forte, des tensions avec leurs collègues ou le public plus fréquentes.

Edward, K. L., Ousey, K., Warelw, P., et al. (2014). "Nursing and aggression in the workplace: a systematic review." *Br J Nurs* **23**(12): 653-654, 656-659.

Personal experiences of aggression or violence in the workplace lead to serious consequences for nurses, their patients, patient care and the organisation as a whole. While there is a plethora of research on this topic, no review is available that identifies types of aggression encountered, individuals perceived to be most at risk and coping strategies for victims. The aim of this systematic review was to examine occupational anxiety related to actual aggression in the workplace for nurses. Databases (MEDLINE, CINAHL and PsycINFO) were searched, resulting in 1543 titles and abstracts. After removal of duplicates and non-relevant titles, 137 papers were read in full. Physical aggression was found to be most frequent in mental health, nursing homes and emergency departments while verbal aggression was more commonly experienced by general nurses. Nurses exposed to verbal or physical abuse often experienced a negative psychological impact post incident.

Laker, C., Callard, F., Flach, C., et al. (2014). "The challenge of change in acute mental health services: measuring staff perceptions of barriers to change and their relationship to job status and satisfaction using a new measure (VOCALISE)." *Implementation Science* **9**: 1-23

<http://www.implementationscience.com/content/pdf/1748-5908-9-23.pdf>

Health services are subject to frequent changes, yet there has been insufficient research to address how staff working within these services perceive the climate for implementation. Staff perceptions, particularly of barriers to change, may affect successful implementation and the resultant quality of care. This study measures staff perceptions of barriers to change in acute mental healthcare. It identifies whether occupational status and job satisfaction are related to these perceptions, as this might indicate a target for intervention that could aid successful implementation. As there were no available instruments capturing staff perceptions of barriers to change, we created a new measure (VOCALISE) to assess this construct.

Micheau, J. et Moliere, E. (2014). "Étude qualitative sur le thème de l'emploi du temps des infirmiers et infirmières du secteur hospitalier." *Série Etudes Et Recherche - Document De Travail - Drees*(132)

<https://drees.solidarites-sante.gouv.fr/publications/documents-de-travail-1998-2019/etude-qualitative-sur-le-theme-de-lemploi-du-temps-des>

[BDSP. Notice produite par MIN-SANTE DR0xp7BG. Diffusion soumise à autorisation]. Les infirmières représentent aujourd'hui près du quart des effectifs des hôpitaux. Si le diplôme fait l'unité de la profession, le terme d'infirmière masque cependant des réalités d'emploi et de travail très diverses. Cette étude s'appuie sur des entretiens qualitatifs réalisés auprès d'une soixantaine d'infirmières exerçant dans dix établissements différents. Elle donne à voir les emplois du temps à la fois sous l'angle de l'organisation des rythmes de travail, de ses saisonnalités et du contenu des journées de travail. Elle propose des explications à ces organisations du temps : contraintes liées à l'établissement ou au service et contraintes liées à des choix personnels. Elle décrit aussi les façons dont se négocient les ajustements de temps de travail ou de contenu de tâche en réponse aux besoins des établissements et des infirmières.

Nourry, N., Luc, A., Lefebvre, F., et al. (2014). "Psychosocial and organizational work environment of nurse managers and self-reported depressive symptoms: cross-sectional analysis from a cohort of nurse managers." *Int J Occup Med Environ Health* **27**(2): 252-269.

OBJECTIVES: The association between depressive symptoms and psycho-organisational work environment has been established in the literature. Some studies have evaluated depressive symptoms in healthcare workers, but little research has been carried out among nurse managers. The aim of the study is to evaluate the depressive symptoms prevalence among nurse managers' population and work environment factors. MATERIAL AND METHODS: A descriptive correlational research design was used. Data were collected from 296 nurse managers in five hospitals in the eastern area of France between 2007 and 2008. Health outcomes were evaluated by measuring depressive symptoms (CES-D scale), the exposure data by assessing psycho-organisational work environment with effort-reward imbalance-model of Siegrist. Multiple logistic regressions were used to describe the strength of the association between depressive symptoms and effort-reward imbalance adjusted for personal and occupational characteristics of the nurse managers. RESULTS: Among the nurse managers, a third had depressive symptoms, and 18% presented an effort-reward imbalance (ratio: ≥ 1). A significant association was found between depressive symptoms and effort-reward imbalance (OR = 10.81, 95% CI: 5.1-23, $p < 10^{-3}$), and with esteem as a reward (OR = 3.21, 95% CI: 1.6-6.3, $p < 10^{-2}$). CONCLUSION: In view of the hierarchical situation of nurse managers and their primary roles in hospitals, it is necessary to take prevention measures to improve their work environment and health.

Poisson, C., Alderson, M., Caux, C., et al. (2014). "La détresse morale vécue par les infirmières : état des connaissances." *Recherche en soins infirmiers* **117**(2): 65-74.

<https://www.cairn.info/revue-recherche-en-soins-infirmiers-2014-2-page-65.htm>

Durant leur carrière, les infirmières de tous les milieux de pratique sont susceptibles de vivre de la détresse morale. Malgré les nombreuses conséquences à court et long terme sur l'organisation de santé, la santé des infirmières, la qualité et la sécurité des soins dispensés aux patients, les actions pour prévenir la détresse morale demeurent encore peu documentées. Cet article a pour but de circonscrire, à travers les écrits, le phénomène de la détresse morale vécue par les infirmières et de proposer des stratégies d'interventions susceptibles de contribuer à la prévenir chez ces dernières. La psychodynamique du travail (PDT) guidera l'ensemble de la réflexion à l'aide des concepts centraux de cette approche, à savoir : la souffrance au travail (en lien avec l'organisation du travail) et les stratégies de défense développées par les infirmières en réaction à la souffrance au travail. Cet article a permis d'identifier, à travers les écrits, les facteurs influençant la détresse morale chez les infirmières et les conséquences qu'elle peut entraîner. Les stratégies d'intervention efficaces susceptibles de la prévenir sont proposées et des pistes d'action sont suggérées pour les organisations et les gestionnaires désireux de réduire, voire de prévenir, la détresse morale chez les infirmières.

Brown, P., Fraser, K., Wong, C. A., et al. (2013). "Factors influencing intentions to stay and retention of nurse managers: a systematic review." *J Nurs Manag* **21**(3): 459-472.

AIMS: This systematic review aimed to explore factors known to influence intentions to stay and retention of nurse managers in their current position. **BACKGROUND:** Retaining staff nurses and recruiting nurses to management positions are well documented; however, there is sparse research examining factors that influence retention of nurse managers. **EVALUATIONS:** Thirteen studies were identified through a systematic search of the literature. Eligibility criteria included both qualitative and quantitative studies that examined factors related to nurse manager intentions to stay and retention. Quality assessments, data extraction and analysis were completed on all studies included. Twenty-one factors were categorized into three major categories: organizational, role and personal. **KEY ISSUES:** Job satisfaction, organizational commitment, organizational culture and values, feelings of being valued and lack of time to complete tasks leading to work/life imbalance, were prominent across all categories. **CONCLUSION:** These findings suggest that intentions to stay and retention of nurse managers are multifactorial. However, lack of robust literature highlights the need for further research to develop strategies to retain nurse managers. **Implications FOR NURSE MANAGEMENT:** Health-care organizations and senior decision-makers should feel a responsibility to support front-line managers in relation to workload and span of control, and in understanding work/life balance issues faced by managers.

Chan, Z. C., Tam, W. S., Lung, M. K., et al. (2013). "A systematic literature review of nurse shortage and the intention to leave." *J Nurs Manag* **21**(4): 605-613.

AIM: To present the findings of a literature review regarding nurses' intention to leave their employment or the profession. **BACKGROUND:** The nursing shortage is a problem that is being experienced worldwide. It is a problem that, left unresolved, could have a serious impact on the provision of quality health care. Understanding the reasons why nurses leave their employment or the profession is imperative if efforts to increase retention are to be successful. **EVALUATION:** Electronic databases were systematically searched to identify English research reports about nurses' intention to leave their employment or the profession. Key results concerning the issue were extracted and synthesized. **KEY ISSUES:** The diversified measurement instruments, samples and levels of intention to leave caused difficulties in the attempt to compare or synthesize findings. The factors influencing nurses' intention to leave were identified and categorized into organizational and individual factors. **CONCLUSIONS:** The reasons that trigger nurses' intention to leave are complex and are influenced by organizational and individual factors. Further studies should be conducted to investigate how external factors such as job opportunities correlate with nurses' intention to leave. **IMPLICATIONS FOR NURSING MANAGEMENT:** The review provides insight that can be useful in designing and implementing strategies to maintain a sustainable workforce in nursing.

Choi, S. P.-P., Cheung, K. I. N. et Pang, S. M.-C. (2013). "Attributes of nursing work environment as predictors of registered nurses' job satisfaction and intention to leave." *J Nurs Manag* **21**(3): 429-439.
<https://doi.org/10.1111/j.1365-2834.2012.01415.x>

Aim : To examine how front-line registered nurses' perception of their work environment associates with and predicts nurse outcomes in terms of job satisfaction and turnover intention. **Background?** Mounting evidence has pointed to an inseparable link between attributes of the nursing work environment and nurse outcomes. However, there is a paucity of research examining nurses' perception of their work environment beyond the Western context. **Methods :** This cross-sectional survey involved 1271 registered nurses working in 135 inpatient units in 10 public hospitals in Hong Kong. The instrument comprised items developed from in-depth interviews with front-line nurses that explored nurses' perception of their work environment. **Results :** Factor analysis identified five dimensions (professionalism, co-worker relationship, management, staffing and resources, and ward practice) of the nursing work environment. Logistic regression analysis further identified professionalism, management and ward practice as significant factors in predicting nurses' turnover intention, and staffing and resources as an additional factor in predicting their job satisfaction. **Conclusions :** Attributes of the nursing work environment have a significant bearing on nurses' job satisfaction and intention to leave. **Implications for nursing management?** Managerial effort should

focus on improving nurses' work conditions through detailed resource planning, effective management and removal of work constraints that affect nursing practice.

Dante, A., Petrucci, C. et Lancia, L. (2013). "European nursing students' academic success or failure: A post-Bologna Declaration systematic review." *Nurse Educ Today* **33**(1): 46-52.

Objectives: The aim of this systematic review is to synthesise the available evidence in the European scientific literature produced after the Bologna Declaration and to evaluate studies that quantify and examine the factors associated with the academic success or failure of nursing students. **Design:** A systematic review of the literature was conducted. **Data Sources:** Major health literature databases were searched for studies published from 2000 to 2011. **Review Methods:** This review includes only European observational studies that were submitted to a quality assessment by two researchers before inclusion. **Results:** Only five studies were included in this review. There are discordant results regarding the predictors of success or failure, which were common objects of study (gender, age, qualification on entry, ethnic group). Other factors were studied individually (student personality, gendered view of nursing careers, intention to leave, family commitments, working while on course, student performance, clinical learning environment) need to be confirmed in additional studies. Although the predictors may be relevant at the local level, given their low external validity and the conflicting results, it is not possible to state with certainty that these factors are effectively predictive of success or failure in the context of post-Bologna Declaration Europe. **Conclusions:** This review showed that over the last ten years, in the European context, only a few high-quality observational studies have been performed. In this regard, given the small number and heterogeneity of the available studies, there is little useful evidence available for Higher Education Institutions (HEIs) to effectively address the problem. In the future, European researchers should focus not only on the documentation of the predictors but also on the documentation of the outcomes produced by the HEI strategies that have been implemented to prevent avoidable academic failure and contain physiological academic failure. (C) 2012 Elsevier Ltd. All rights reserved.

Lamy, S., De Gaudemaris, R., Lepage, B., et al. (2013). "The organizational work factors' effect on mental health among hospital workers is mediated by perceived effort-reward imbalance: result of a longitudinal study." *J Occup Environ Med* **55**(7): 809-816.

OBJECTIVES: This longitudinal study aimed to test the hypothesis that organizational work factors (OWFs) may be related to depressive symptoms through an increased effort-reward imbalance (ERI) ratio among registered nurses (RNs) and nursing assistants working in hospitals. **METHODS:** We studied 2117 female RNs and nursing assistants who stayed in the same work unit and position during the follow-up from the ORSOSA (ORGanisation des SOins-SANTé) longitudinal study. The work characteristics and workers' health were assessed in 2006 and 2008. **RESULTS:** We confirmed our hypothesis of both direct and mediated effects of OWFs on workers' health. We showed that issues about patient-related information exchanges increased RNs' depressive disorders by increasing first a perceived ERI. **CONCLUSIONS:** Our results advocate integrating both the work organizational level and the individual level into preventive actions to improve workers' mental health.

Lamy, S., De Gaudemaris, R., Sobaszek, A., et al. (2013). "[Improvement of hospital working conditions: ORSOSA, from research to preventive actions]." *Int J Environ Res Public Health* **25**(4): 389-397.

The health of hospital workers, nurses and nurse-aids constitutes a public health challenge for three reasons: maintenance of personnel at work in a context in which many express their desire to quit their jobs, protection of their health, and maintenance of quality of care. ORSOSA (ORGanisation des SOins et SANTé des soignants) is a multidisciplinary interventional population health research programme designed to improve quality of life in the workplace of healthcare workers. This programme is designed to develop a tool to diagnose psychosocial and organisational work factors (POWFs) and mechanical constraints (MC), and then to implement this method in primary prevention interventions. ORSOSA consists of two steps: research (ORSOSA 1) and intervention (ORSOSA 2). In ORSOSA 1, a prospective cohort of healthcare workers was developed to construct and validate the

diagnostic tool of work-related constraints at the work unit level. ORSOSA 2 consists of using the tool to implement both a collective and consensual dynamic based on collective restitution of the strengths and weaknesses of the work unit in order to propose recommendations for better quality of life at work. ORSOSA is now deployed in 4 teaching hospitals (Lille, Bordeaux, Grenoble and Strasbourg), each with 5 peripheral hospitals. Evaluation and follow-up of the programme is ongoing.

Laschinger, H. K. S., Wong, C. A. et Grau, A. L. (2013). "Authentic leadership, empowerment and burnout: a comparison in new graduates and experienced nurses." *J Nurs Manag* **21**(3): 541-552.
<https://doi.org/10.1111/j.1365-2834.2012.01375.x>

Aim : To examine the effect of authentic leadership and structural empowerment on the emotional exhaustion and cynicism of new graduates and experienced acute-care nurses. Background? Employee empowerment is a fundamental component of healthy work environments that promote nurse health and retention, and nursing leadership is key to creating these environments.

Laurant, M., Harmsen, M. et Faber, M. (2010). Revision of professional roles and quality improvement. A review of the evidence. Lenders Health Foundation
<https://www.health.org.uk/publications/revision-of-professional-roles-and-quality-improvement>

This report focuses on the revision of roles between doctors and: advanced practice nurses such as nurse practitioners, specialist nurses, clinical nurses and practice nurses, physician assistants pharmacists, and allied healthcare professionals such as physical therapists, speech and language therapists, dietitians and paramedics. The report considers the impact of professional role revision on quality of care and outcomes.

Li, Y. I. N. et Jones, C. B. (2013). "A literature review of nursing turnover costs." *J Nurs Manag* **21**(3): 405-418.
<https://doi.org/10.1111/j.1365-2834.2012.01411.x>

Aim : To report the findings of a literature review of studies examining nursing staff turnover costs published between 1990 and 2010. Background? Nurse turnover is a global concern that is both costly for health-care organizations and, in the context of the work environment, affects quality and safety. Evaluation? We reviewed past literature and describe the conceptualization of nurse turnover, evaluate the methodologies and calculation of costs, identify the reported range of turnover costs and provide suggestions for future study. Key issues? We report inconsistencies in past studies in terms of the conceptualization and measurement of nurse turnover and turnover rates, the methodologies for gathering data and the data sources used, the approaches for calculating turnover costs and the resulting nursing staff turnover costs estimated. Conclusion? Past studies reached different conclusions about nurse turnover. We still need to explore the actual costs and benefits of nurse turnover and retention. Implications for nursing management? This study should be helpful for nurse executives as they build a business case to address nurse turnover in their organizations, and for policy-makers as they develop policies about turnover.

Mosadeghrad, A. M. (2013). "Occupational stress and turnover intention: implications for nursing management." *International journal of health policy and management* **1**(2): 169.

Background: The main purpose of this study was to explore the status of occupational stress among hospital nurses in Isfahan, Iran. It also aimed to examine the relationship between nurses' occupational stress and their intention to leave the hospital. Methods: The study employed a cross-sectional research design. A validated questionnaire was used to collect data from 296 nurses. Respondents were asked to rate the intensity of 30 common occupational stressors using a five-point scale. Results: A third of hospital nurses rated their occupational stress high. The major sources of stress were inadequate pay, inequality at work, too much work, staff shortage, lack of promotion, job insecurity and lack of management support. More than 35% of nurses stated that they are considering leaving the hospital, if they could find another job opportunity. Occupational stress was positively associated with nurses' turnover intentions. Conclusion: Hospital managers should develop and apply

appropriate policies and strategies to reduce occupational stress and consequently nurses' turnover intention.

Van Bogaert, P., Clarke, S., Willems, R., et al. (2013). "Nurse practice environment, workload, burnout, job outcomes, and quality of care in psychiatric hospitals: a structural equation model approach." *J Adv Nurs* **69**(7): 1515-1524.

(2012). "Un groupe professionnel aux multiples facettes : les infirmières." *Sociologie Santé* (35): 363

Cette livraison de la revue *Sociologie Santé* porte sur la profession infirmière et s'inscrit dans la continuité d'une réflexion amorcée dans un numéro précédent de cette revue intitulé : Soins infirmiers, sens, non-sens d'une pratique (décembre 1997). Il aborde cette profession sous différentes facettes : en libéral, à l'hôpital, au service de la santé au travail et à l'école, avec en arrière-fond, l'évolution du métier et de la formation initiale sur la période 1997-2012.

Brewer, C. S., Kovner, C. T., Greene, W., et al. (2012). "Predictors of actual turnover in a national sample of newly licensed registered nurses employed in hospitals." *J Adv Nurs* **68**(3): 521-538.

Aim. This paper is a report of a study of factors that affect turnover of newly licensed registered nurses in United States hospitals. **Background.** There is a large body of research related to nursing retention; however, there is little information specific to newly licensed registered nurse turnover. Incidence rates of turnover among new nurses are unknown because most turnover data are not from nationally representative samples of nurses. **Method.** This study used a longitudinal panel design to obtain data from 1653 registered nurses who were recently licensed by examination for the first time. We mailed surveys to a nationally representative sample of hospital registered nurses 1 year apart. The analytic sample consisted of 1653 nurses who responded to both survey mailings in January of 2006 and 2007. **Results.** Full-time employment and more sprains and strains (including back injuries) result in more turnover. Higher intent to stay and hours of voluntary overtime and more than one job for pay reduces turnover. When we omitted intent to stay from the probit model, less job satisfaction and organizational commitment led to more turnover, confirming their importance to turnover. Magnet Recognition Award (R) hospitals and several other work attributes had no effect on turnover. **Conclusion.** Turnover problems are complex, which means that there is no one solution to decreasing turnover. Multiple points of intervention exist. One specific approach that may improve turnover rates is hospital policies that reduce strains and sprains.

Epp, K. (2012). "Burnout in critical care nurses: a literature review." *Dynamics* **23**(4): 25-31.

Burnout and its development in critical care nurses is a concept that has received extensive study, yet remains a problem in Canada and around the world. Critical care nurses are particularly vulnerable to developing burnout due to the chronic occupational stressors they are exposed to, including high patient acuity, high levels of responsibility, working with advanced technology, caring for families in crisis, and involved in morally distressing situations, particularly prolonging life unnecessarily. The purpose of this article is to explore how the chronic stressors that critical care nurses are exposed to contribute to the development of burnout, and strategies for burnout prevention. A review of the literature between the years 2007 and 2012 was conducted and included the search terms burnout, moral distress, compassion fatigue, intensive care, critical care, and nursing. The search was limited to the adult population, English language, and Western cultures. The results revealed that nurse managers play a crucial role in preventing burnout by creating a supportive work environment for critical care nurses. Strategies for nurse managers to accomplish this include being accessible to critical care nurses, fostering collegial relationships among the different disciplines, and making a counsellor or grief team available to facilitate debriefing after stressful situations, such as a death. In addition, critical care nurses can help prevent burnout by being a support system for each other and implementing self-care strategies.

Moret, L., Anthoine, E., Paillé, C., et al. (2012). "Relationship between inpatient satisfaction and nurse absenteeism: an exploratory study using WHO-PATH performance indicators in France." *BMC Res Notes* 5: 83.

BACKGROUND: Indicators describing results of care are widely explored in term of patient satisfaction (PS). Among factors explaining PS, human resources indicators have been studied in terms of burnout or job satisfaction among healthcare professionals. No research work has set out to explore the effect of absenteeism on PS scores. The objective of this study was to explore interaction between rate of absenteeism among nurses and PS results. **METHODS:** France has taken part in a project named PATH (Performance Assessment Tool for Hospitals) of the World Health Organization, aiming to develop a tool for the assessment of hospital performance. In the first semester 2008, 25 volunteering short-stay hospitals (teaching, general and private) provide complete data on nurse short-absenteeism (periods of up to 7 consecutive days of sick leave) and on PS (a cross-sectional postal survey using a standardized validated French-language scale EQS-H exploring "quality of medical information" (MI) and "relationships with staff and daily routine" (RS)). A multi-level model was used to take into account of the hierarchical nature of the data. **RESULTS:** Two thousand and sixty-five patients responded to the satisfaction questionnaire (participation rate: 40.9%). The mean age of respondents was 58 yrs (± 19), 41% were men. The mean duration of hospitalisation was 7.5 days (± 11.1). The mean absenteeism rate for nurses was 0.24% (± 0.14). All the PS scores were significantly and negatively correlated with rate of short-absenteeism among nurses (MI score: $p = -0.55$, $p < 0.01$), RS score $p = -0.47$, $p = 0.02$). The mixed model found a significant relationship between rate of absenteeism among nurses and PS scores (MI: $p = 0.027$; RS: $p = 0.017$). **CONCLUSION:** Results obtained in this study show that short-term absenteeism among nurses seems to be significantly and negatively correlated with PS. Our findings are an invitation to deepen our understanding of the impact of human resources on PS and to develop more specific projects.

Nunez, M., Henan, A. et Fayard, E. (2012). "The drop: a social phenomenon". Experiences of nursing programs students of the University of Tolima." *Praxis-Colombia* 8: 7-16.

It has been recognized as an academic dropout problem that is present in all levels of schooling, and in all academic programs in both classroom and distance of the world. The statistics thrown in studies conducted by university students in Latin America show that levels drop from 49% to 73%, and those specifically in the nursing program in Colombia demonstrate higher academic levels drop to 45 %. **Objective:** To identify the meaning of the experience of having deserted and the factors that led to the desertion of students in nursing program at the University of Tolima. **Methodology:** Research was conducted with a phenomenological approach, during 2009, with the participation of eight men and six women aged between 19 and 22 years of age, who said that his desertion from the nursing program came from two main causes: the motivation for academic medicine and for reasons of economic order. The technique of data collection was the in-depth interview. **Results:** The description of each experience helped found between students who dropped into the medicine category such as "life project", "take your time, «medicine "if science" and nursing "living with the disease". **Conclusion:** In contrast to the results of other research in the area, for students of nursing from the University of Tolima who moved to the medical program, desertion meant to make your life plan supported by the environment family.

Oni, H. T. (2012). Les Infirmiers alertent les pouvoirs publics et les candidats à l'élection présidentielle sur la qualité et la sécurité des soins à l'hôpital, Paris : ONI

L'Ordre national des Infirmiers a réalisé une grande enquête nationale sur la première profession de santé en France (520 000 praticiens) en interrogeant plus de 21 000 infirmières et infirmiers (salariés du secteur public, privé, libéraux et étudiants). Les questions portaient notamment sur la sécurité des soins à l'hôpital, les réformes réalisées ces dernières années et leurs propositions d'évolutions. Selon le sondage, près d'un infirmier sur deux estime ne pas pouvoir assurer une sécurité des soins optimale à ses patients au regard de ses conditions d'exercice. Un chiffre qui varie naturellement selon le secteur d'exercice mais qui reste élevé : 18 % en libéral, 51 % en secteur public. Le manque de qualité et de sécurité des soins est directement corrélé à des conditions de travail difficiles. Les infirmiers

placent en priorité absolue dans leur carrière les conditions de travail, largement devant la rémunération ou les perspectives d'évolution de carrière. Ils se montrent critiques envers les réformes réalisées ces dernières années, surtout la mesure sur les coopérations entre professionnels de santé, permettant un transfert de tâches médicales aux infirmiers sans aucune reconnaissance financière, statutaire ou universitaire.

Pulido-Martos, M., Augusto-Landa, J. M. et Lopez-Zafra, E. (2012). "Sources of stress in nursing students: a systematic review of quantitative studies." *Int Nurs Rev* **59**(1): 15-25.

Aim: This study aimed to identify the main sources of stress for students of nursing and the evolution of the stressors when training in nursing competences. Background: Levels of stress are higher for health professionals than for other workers. A higher number of stressors with negative health consequences are present, especially among nursing professionals. Stress is a psychosocial factor that influences the academic performance and well-being of this group. The interest in analysing sources of stress in nursing students is due to the influence that their training period may have on their perceptions of stress on their future work. Methods: We conducted a systematic review of the scientific literature on stressors in nursing students. The search comprised all the articles published at the end of 2010. Results: The most common sources of stress relate to academics (reviews, workload and problems associated with studying, among others). Other sources of stress include clinical sources (such as fear of unknown situations, mistakes with patients or handling of technical equipment). In general, no changes occur at the different years of the student's education. Conclusion: Comparing studies is difficult because of the differences among them (designs, instruments, number of stressors, etc.). However, our revision gives a current state-of-the-art and includes descriptive information that might be very useful for future research. Furthermore, we offer some recommendations for improving the design of curricula taking into account sources of stress.

Randon, S. (2012). The evolution of healthcare managers role: a comparison France/United Kingdom. Villeurbanne HALSHS

http://hal.archives-ouvertes.fr/docs/00/74/88/40/PDF/Acte_de_colloque_franco_tcheque_2012.pdf

Nursing shortage is a worldwide problem throughout countries and job satisfaction is recognized to be related with staff retention. In France, the last hospital reforms are changing the healthcare managers' role which have an important role on nurses job satisfaction. The aim of this study is to investigate the consequences of the evolution of healthcare managers role. This study shows that the evolution of healthcare managers role can be dangerous toward their relation with the staff and suggests some future research on the influence of nurse managers backgrounds on the style of leadership and on nurses job satisfaction.

Rothier-Bautzer, E. (2012). *Entre Cure et Care : les enjeux de la professionnalisation infirmière*, Paris : Editions Lamarre

<http://www.parisdescartes.fr/CULTURE/Publications/Entre-cure-et-care-les-enjeux-de-la-professionnalisation-infirmiere>

La conception du soin qui prévaut au XX^e siècle trouve son origine dans un modèle centré sur le curatif (Cure) qui tend à s'opposer aux situations qui requièrent un investissement relationnel étalé dans la durée (Care). Le soin a changé. Les progrès constatés dans de nombreux traitements au cours du XX^e siècle ont participé à la production d'une nouvelle culture du soin du XXI^e siècle dont le centre n'est plus l'hôpital, mais l'articulation des situations de soins hospitalières, au domicile des patients, et dans des structures d'accueil intermédiaires. Les traitements permettent désormais de continuer à vivre, souvent longtemps, tout en restant malade. Nombreux sont ceux qui continuent à vivre tout en se soignant continuellement. Ils sont donc amenés à entretenir une relation régulière avec leurs soignants, en participant activement au meilleur maintien de leur état de santé et en s'intéressant de près à la pathologie dont ils sont atteints. Sous-estimer le travail du « prendre soin » (care), revient à mettre en péril les possibilités curatives. Ce processus entretient malaise et désaffection chez les professionnels de santé et déficit de confiance du côté des patients. Cet ouvrage montre, à partir de

l'étude de la professionnalisation des infirmières, comment les modèles de formation et de division du travail des soignants, qui se sont édifiés tout au long du siècle dernier, ont générée ces situations contreproductives. La révision des parcours de formation, fréquemment débattue mais artificiellement résolue par le nouveau référentiel de septembre 2009, s'appuie toujours sur les mêmes modèles professionnels et perpétue, de ce fait, les obstacles à la prise en compte des besoins croissants d'accompagnement des patients atteints de maladies chroniques. Comment les soignants vont-ils se saisir du malaise qu'ils traversent, pour construire, avec les patients, une nouvelle culture du soin, à l'heure où les réseaux de soins se développent et où l'autonomie est devenue une valeur suprême ? Par son exploration des problématiques du soin et des logiques d'acteurs, cet ouvrage est indispensable pour comprendre les enjeux des professions paramédicales et envisager des stratégies d'avenir.

Tripodi, D., Roedlich, C., Laheux, M. A., et al. (2012). "Stress perception among employees in a French University Hospital." *Occup Med (Lond)* **62**(3): 216-219.

BACKGROUND: Nantes University Hospital comprises 20 activity sectors. **AIMS:** To investigate the role of the work environment at the individual level, as well as the workplace level, in explaining the variability in employees' perception of stress. **METHODS:** A self-administered enhanced Karasek Job Content Questionnaire was sent to employees. The main variables were the psychological job demand (PJD) score and the job decision latitude (JDL) score. Univariate and multivariate logistic regression analyses were conducted to estimate crude odds ratio (OR) and adjusted OR. **RESULTS:** One thousand eight hundred and sixty-eight workers were included. Nursing managers (25.9 ± 3.4), non-specialized nurses (25.6 ± 3.5) and physicians (25.3 ± 3.4) had the highest PJD. Cleaning staff (61.4 ± 11.4) and nurse aides (63.6 ± 8.8) had the lowest JDL. Items correlated with high PJD are: unacceptable work schedule, adjusted OR 2.16 (95% CI = 1.3-3.5); unsatisfactory workstation accessibility, OR 1.92 (95% CI = 1.1-3.2); getting from A to B, OR 1.67 (95% CI = 1.2-2.4); and heavy manual handling, OR 1.62 (95% CI = 1.1-2.3). Sleeping tablet use was linked to high PJD ($P < 0.01$), extra workload ($P < 0.05$) and tiredness ($P < 0.05$). Use of painkillers was correlated with musculoskeletal disorders ($P < 0.05$). **CONCLUSIONS:** Our study highlighted women >40 years old, nurse managers, physicians, permanent and/or full-time workers having a high PJD. Nursing aides, medical secretary and nurses presented with high strain. Better control measures should be implemented for those socioprofessional categories to improve prevention measures. This study should be repeated in the future with a multi-centre approach to determine the generalizability of the findings.

Vanhanen-Nuutinen, L., Janhonen, S., Maunu, M., et al. (2012). "Changes in Finnish nursing students' nursing orientations between mid 1990s and mid-2000s." *Nurse Educ Today* **32**(5): 490-496.

Aims: The main purpose of the study was to identify nursing students' orientations to nursing, their experiences of caring and nursing, the meaning of nursing and the expectations applied to a nursing career, and to report the changes in the orientations between the mid-1990s and the mid-2000s. Another aim was to determine the extent to which students' age, sex, having children, pre-educational caring experiences and intentions to leave nursing might explain the changes in nursing orientations. **Background:** There is a worldwide shortage of nurses but at the same time there is an ever decreasing number of applicants that are entering nursing education. Young people are less interested in choosing nursing as a career option than they were one or two decades ago. **Methods:** A sample of 426 nursing students in 1997 and 660 students in 2006-2007 from the Universities of Applied Sciences in different parts of Finland completed a questionnaire containing questions concerning the students' background factors and 26 Likert-type statements concerning their nursing orientations. **Results:** The following orientations were identified: personal responsibility, idealistic nursing, self-actualization, and family centrality. Statistically significant changes were found in all of the orientations between the two periods. Fewer nursing students in the 2000s were oriented to idealistic nursing or emphasised self-actualization. Instead, there were more family centrality oriented nursing students in the mid-2000s than in the mid-1990s. **Conclusions:** The results reflect the changes in the student generation applying for nursing education. The results challenge nurse educators to use teaching methods that promote students' awareness of their individual nursing orientations. (C) 2011 Elsevier Ltd. All rights reserved.

Bae, S. H. (2011). "Assessing the relationships between nurse working conditions and patient outcomes: systematic literature review." *J Nurs Manag* **19**(6): 700-713.

AIM: The purpose of the study was to systematically evaluate nurse working conditions and to review the literature dealing with their association with patient outcomes. **BACKGROUND:** Improving nurse working conditions is essential to address nursing shortages. Although general reviews of the literature support the positive link between working conditions and patient outcomes, definitive evidence has been lacking. **EVALUATION:** A search of six electronic bibliographic databases was conducted for the primary research published in English, from January 2000 to October 2009. **KEY ISSUES:** The concepts of working conditions were categorized into 10 groups of working conditions. A total of 69 relationships between working conditions and patient outcomes were examined. **CONCLUSIONS:** Increased attention has been drawn to nurse working conditions resulting from nursing shortages. The findings of this review suggested that the evidence supporting positive relationships between working conditions and patient outcomes is inconclusive. Further studies of a longitudinal and interventional nature in various settings are needed to advance knowledge of the complex contextual and multivariate influences among nurse working conditions and patient outcomes. **IMPLICATIONS FOR NURSING MANAGEMENT:** Efforts to improve working conditions should be made in various health-care work settings to ensure patient safety and improve patient quality of outcomes.

Boyd, J. K., Hernandez, J. Y. et Braun, K. L. (2011). "Engaging Nurse Aide Students to Develop a Survey to Improve Enrollment and Retention in College." *Progress in Community Health Partnerships-Research Education and Action* **5**(2): 169-176.

Background: Students from lower socioeconomic status (SES) backgrounds have historically experienced high rates of college dropout. Surveys often are used to assess supports and barriers (SB) to college enrollment and completion, and findings drive the design of interventions to improve student recruitment and retention. However, standard surveys may not include questions that solicit the breadth of issues facing low-income minority individuals. **Objectives:** We used community-based participatory research (CBPR) principles to develop an SB survey to better reflect the concerns of rural, first-generation college students in Hawai'i. **Methods:** An advisory panel (AP) of students and community partners guided the work. The literature informed the first draft of the SB survey. Then we worked with students who had successfully completed a vocational Nurse Aide (NA) Training Program (NATP) course to refine four versions of the SB survey through multiple cycles of online survey review and focus groups. **Results:** The final product included questions in new areas and differently phrased questions in standard areas (e.g., transportation, dependent care, housing, financial aid) to better capture reasons for students dropping out. The survey has proven useful as a student assessment tool, and findings are being used by instructors, counselors, and community partners to add resources and modify programs to increase student success in community college. **Conclusions:** Findings confirm the usefulness of engaging target partners in tool development. An enhanced understanding of SB of students from underrepresented groups will help to improve college recruitment and retention interventions.

Buchan, J. et Black, S. (2011). The Impact of Pay Increases on Nurses' Labour Market: A Review of Evidence from Four OECD Countries. *OECD Health Working Paper*; 57. Paris OCDE
<http://dx.doi.org/10.1787/5kg6jwn16tjd-en>

Nurses are usually the most numerous professionals in the healthcare workforce, and their contribution is a core component in attaining the policy objectives of improved productivity, quality of care and effectiveness in the health sector. The recent global economic crisis, and its related impacts on health sector funding and health labour market dynamics, has reinforced these policy priorities. This report reviews the impact of pay increases on nurses' labour market indicators. It presents background data on trends in the numbers of nurses and the remuneration of nurses in OECD countries; summarises the limited evidence base on pay and labour market behaviour; reports on four case study countries where a significant pay raise was awarded to at least some categories of nurses in

recent years in response to perceived labour market challenges ? the United Kingdom (UK), New Zealand, Finland and the Czech Republic ? using a variety of indicators to illustrate impact; and concludes with key points for policy makers. There has been variable growth in nurses' employment levels in OECD countries in recent years, and nurses' pay rates, in comparison to other earnings in national economies, vary markedly across OECD countries. The country case studies in this report highlight that there were several main drivers for the implementation of a pay rise for nurses, and also identified a range of possible indicators that can be used to assess the impact of changes to nurses' pay. The main impetus for a pay increase came from: labour market concerns (geographic or specialty shortages), which were reported in all four countries; pay equity issues (New Zealand and the UK); structural changes in the pay systems (e.g., increased flexibility) (Finland, New Zealand and the UK); attempts to improve organizational productivity and the quality of care (UK); and improving international pay competitiveness (Czech Republic after EU accession). The review concludes by arguing that how nurses are paid - as well as how much they are paid - is an issue worthy of more detailed examination. While the same policy drivers exist in most OECD countries, nurses' pay systems are very different. The findings suggest that, in the short term at least, the pay increases in the four countries contributed to an increase in the potential "new" supply of entrants to nurse education; the effect on those already in work is more difficult to assess, as their behaviour is also impacted by the complex interaction of other aspects, such as working environment and working conditions, career possibilities, and individuals' priorities.

De Gaudemaris, R., Lang, T., Senechal, M., et al. (2011). "Diagnostic et prévention des contraintes psychologiques et organisationnelles." *Gestions Hospitalières*(509): 537-542

[BDSP. Notice produite par EHESP R0x8nppj. Diffusion soumise à autorisation]. Si la pénibilité physique du travail est bien connue dans les hôpitaux, les contraintes psychologiques et organisationnelles (CPO) au travail sont associées à un risque de pathologies cardio-vasculaires ou mentales et participent aux troubles musculo-squelettiques. L'étude Orsosa a permis de développer et de valider un outil simple de quantification des CPO à partir du vécu des infirmières et aides-soignantes. Cet article, synthèse des travaux de l'étude Orsosa, se veut force de proposition pour améliorer la santé au travail en privilégiant l'approche collective des CPO au niveau de leur source même : les unités de travail.

de Gaudemaris, R., Lang, T., Sobaszek, A., et al. (2011). "[Assessing the impact of psychological and organizational constraints on caregivers]." *Rev Infirm*(175): 22-23.

Through a national cohort of more than 4000 nurses and nursing assistants in 14 university hospital centres, a study has developed a tool to assess the health of nursing staff within nursing units. This tool enables the general health condition of caregivers, as well as their working conditions, to be gauged. On this basis, preventative measures in terms of work organisation can be drawn up.

de Gaudemaris, R., Levant, A., Ehlinger, V., et al. (2011). "Blood pressure and working conditions in hospital nurses and nursing assistants. The ORSOSA study." *Arch Cardiovasc Dis* **104**(2): 97-103.

BACKGROUND: Healthcare workers often are unsatisfied with their working conditions despite declaring to like their jobs. Psychosocial constraints in the workplace have increased recently due to changes in work organization. These psychosocial constraints are linked to cardiovascular diseases. AIM: To analyze the relationship between blood pressure levels and organizational occupational risk factors in female hospital workers, using a new questionnaire (the Nursing Work Index-Extended Organization [NWI-EO] questionnaire), which quantifies psychological and organizational work factors. METHODS: The ORSOSA study is a national, multicentre, cohort study conducted in seven voluntary French university hospitals, including 214 work units with a total of 2307 nurses and 1530 nursing assistants. RESULTS: Systolic and diastolic blood pressure appeared to be significantly associated with age ($P < 0.001$) and excess weight ($P < 0.001$). The difference between systolic blood pressure in day-shift and night-shift workers was 2.5mmHg ($P < 0.001$). The NWI-EO dimension most strongly correlated with systolic and diastolic blood pressure was poor team relationships ($P < 0.01$ for both). For a one-

point difference in the NWI-EO stress score, systolic blood pressure was higher by a mean of 0.2mmHg. CONCLUSION: These results suggest that poor relationships within teams are related to high blood pressure among hospital workers. They add to the evidence that working conditions should be considered and investigated further among other risk factors as a pathway to primary prevention of hypertension and cardiovascular diseases.

Sephel, A. (2011). "Digging deeper: nurse excess or shortage? The effect on a new nurse." Perspect Psychiatr Care 27(6): 390-393.

The past decade has experienced great success in publicizing and decreasing the nursing shortage. Articles describing the shortage continue with impressive but disparate projections of its dimension. New degree programs have been created and established programs expanded as increasing numbers of students answer the call, and there are signs that the publicity has succeeded. Recent graduates have experienced difficulties finding employment or postgraduate training positions, which prompt a more detailed look at the numbers. Previously published research projects the nurse shortage for the year 2025 to lie somewhere between 500,000 and 1,000,000 nurses. If it is presumed that these numbers refer to RNs only, then the net of dropout, retirement, and graduation rates suggests that this projected shortage could be misleading. Articles describing the shortage typically exclude detailed supply-and-demand statistics to support their projections. The projected 2025 deficit of nurses is estimated by one source at 500,000. Currently, nursing programs are graduating more than 100,000 and boarding 50,000 new 4-year-degree RNs per year. According to the National Health Service, more than 10,000 nurses retire each year, yielding a net addition of 40,000 new nurses per year, which yields a net supply by 2025 of 600,000. It seems that the more than 3,000 nursing schools are already graduating enough nurses to carry the loss. The universities have increased the supply of nurse graduates; now, the real shortcoming lays in the dearth of nurse residency programs that help transition the new nurses from the books to the bedside. Most nursing jobs require a year of experience, a luxury allowed by the increased graduates and decreased shortage. The real crisis now appears to be a logjam caused by the increased supply with the near absence of transition training. The resulting frustration of the new graduates, if not fixed, is likely to have adverse affects on retention and supply.

Toode, K., Routasalo, P. et Suominen, T. (2011). "Work motivation of nurses: a literature review." Int J Nurs Stud 48(2): 246-257.

OBJECTIVES: The aim of this review is to describe nurses' work motivation from the perspective of staff nurses. This information would be useful for the development of motivation strategies and further research into nurses' work motivation. DESIGN: A thorough review of the research literature. DATA SOURCES: The literature search was performed using four databases: CINAHL, PubMed, PsychINFO, and SocINDEX. Only studies that met the following criteria were selected for review: (1) were published between 1990 and 2009, (2) were written in English, (3) dealt with work motivation, (4) concerned working staff nurses, (5) involved empirical research, (6) clearly and explicitly provided the research results about the factors affecting nurses' work motivation. Altogether 24 studies met these criteria and were included in this review. REVIEW METHODS: Inductive content analysis was carried out to analyse and categorise the data. RESULTS: Nursing research has neither clear understanding nor consensus about the concept of work motivation; nor has a universal definition been adopted. Despite limited empirical evidence it may be concluded that staff nurses appear to be motivated. Five categories of factors affecting their work motivation were identified: (1) work-place characteristics, (2) working conditions, (3) personal characteristics, (4) individual priorities, and (5) internal psychological states. CONCLUSIONS: Further research is needed to gain a more comprehensive insight into nurses' work motivation and the factors affecting it. This can be achieved by defining the concept of work motivation as precisely as possible, working out a pertinent research methodology, and subsequently developing and testing a theoretical model of nurses' work motivation.

Durand, C. (2010). "La communauté de valeurs : le cas de la profession infirmière." *Gestions Hospitalières*(492): 19-27.

[BDSP. Notice produite par EHESP R0x9k8Fl. Diffusion soumise à autorisation]. L'infirmier appuie son exercice professionnel sur une communauté de valeurs. Bien que son code de déontologie soit endossé au projet républicain, ces valeurs sont aussi issues de l'héritage religieux de cette profession. Si ces valeurs font partie de leur identité professionnelle, c'est parce qu'elles sont aussi constitutives de la nature même du soin de la personne. En outre, le législateur a situé naturellement ces professionnels en posture éthique par la succession des obligations morales qu'il leur a imposée. L'infirmier peut ainsi se retrouver en conflit de valeurs dans des conditions d'exercice qui ne lui permettent pas de les mettre en œuvre. Les stratégies qu'il met en place pour pouvoir continuer à travailler peuvent s'avérer inefficaces. Naît alors une souffrance éthique qui pourrait bien porter une lourde responsabilité dans la crise des vocations et l'hémorragie que connaît aujourd'hui cette profession en France.

Estryng-Béhar, M., Van Der Heijden, B. I. J. M., Fry, C., et al. (2010). "Analyse longitudinale des facteurs personnels et professionnels associés au turnover parmi les soignants." *Recherche en soins infirmiers* **103**(4): 29-45.

<https://www.cairn.info/revue-recherche-en-soins-infirmiers-2010-4-page-29.htm>

Contexte : Alors que de nombreuses études ont mis en évidence les relations entre les facteurs personnels et professionnels associées à la recherche d'emploi et au turnover, il y a un manque de design longitudinaux qui testent cette relation de façon empirique. Objectifs : Cette étude longitudinale examine les facteurs déterminants spécifiques qui différencient ceux que l'on appelle les « restants » et les « partants » parmi les soignants, et identifie les facteurs de risque de départs prématurés en comparant les soignants qui ont quitté leur travail ou la profession infirmière avec les soignants qui sont restés dans leur établissement un an après. Méthode : Cette étude européenne transnationale inclut 34 587 infirmiers (au recueil initial) travaillant dans 623 hôpitaux, maisons de retraite, soins à domicile, et comprend deux mesures avec un intervalle d'un an. Les échantillons finaux pour l'analyse longitudinale incluent 14 016 restants et 866 partants. Pour ce qui concerne les partants, les soignants participant ont dû indiquer à quel point les facteurs personnels et professionnels avaient contribué à leur décision de quitter leur institution. Résultats : Les scores d'intention de partir des soignants ont été plus élevés à la mesure initiale parmi ceux qui ont quitté l'organisation au cours des 12 mois suivants que parmi ceux qui y sont restés (24, 0 % versus 13, 5 %). Une majorité de soignants (86, 8 %) ont quitté leur profession volontairement. Les départs involontaires sont survenus plus souvent dans les pays de l'Europe de l'Est. Les soignants ont indiqué que les raisons de départ ont été : les conditions de travail (par exemple, les problèmes relationnels, les difficultés émotionnelles, la pression temporelle et les difficultés pour la qualité des soins, l'insatisfaction de l'utilisation de ses compétences et le manque d'autonomie, les difficultés d'horaires de travail, l'insatisfaction du salaire) ; les raisons familiales (soins aux personnes de la famille). Pour un nombre important de soignants, les raisons de santé et le désir de formation complémentaire ont contribué à la décision de partir. Discussion : Les organisations de santé devraient porter attention à des mesures préventives afin de protéger le marché du travail potentiel. Des recommandations sont faites pour le développement des ressources humaines dans les organisations de santé et pour d'autres recherches empiriques, afin de mieux comprendre à quel point différentes politiques de santé dans les pays européens expliquent la variation dans l'issue concernant la stabilité des personnels.

Fiabane, E., Giorgi, I., Sguazzin, C., et al. (2013). "Work engagement and occupational stress in nurses and other healthcare workers: the role of organisational and personal factors." *J Clin Nurs* **22**(17-18): 2614-2624.

<https://onlinelibrary.wiley.com/doi/abs/10.1111/jocn.12084>

Aims and objectives The aims of this study were to: (1) identify the role of organisational and personal factors in predicting work engagement in healthcare workers and (2) compare work engagement and occupational stress perceptions of healthcare professional categories. Background Healthcare

professionals, with particular regard to nurses, are exposed to several job stressors that can adversely affect both their mental and physical health and also decrease work engagement. Work engagement can be considered as the positive opposite of burnout, and it is characterised by energy, involvement and professional efficacy. Design A cross-sectional survey research was conducted with self-report questionnaires. Methods The Maslach Burnout Inventory–General Survey, the Areas of Worklife Scale and four scales from the Occupational Stress Indicator were administered to a sample of 198 hospital staff (registered nurses, nurse aides, physicians and physiotherapists), of which 110 participated in the study. Results The most significant predictors of energy were workload, mental health and job satisfaction; the best predictors of involvement were community, workload, mental health and job satisfaction; professional efficacy was best predicted by values and job satisfaction. In relation to the second aim, physiotherapists had the highest levels of occupational stress and disengagement from their work, while nurse aides were the most work-engaged and job-satisfied professional category, with positive perceptions of the work environment. Conclusions Both organisational and personal factors were found to be significantly associated with work engagement. In this study, physiotherapists were the category with the highest risk of work-related psychological problems, whereas nurse aides had the lowest risk. Relevance to clinical practice Interventions aimed at improving clinical practice and psychological health of nurses and hospital staff should focus on workload, workers' personal expectations and job satisfaction.

Flinkman, M., Leino-Kilpi, H. et Salantera, S. (2010). "Nurses' intention to leave the profession: integrative review." *J Adv Nurs* **66**(7): 1422-1434.

Title. Nurses' intention to leave the profession: integrative review. Aim. This paper is a report of a study conducted to (1) review and critique the published empirical research on nurses' intention to leave the profession and (2) synthesize the findings across studies. Background. Lack of nurses and nurse turnover represent problems for the healthcare system in terms of cost, the ability to care for patients and the quality of care. At a time of current nursing shortage, it is important to understand the reasons why nurses intend to leave the profession. Data sources. A review was conducted through an initial search of MEDLINE, CINAHL and PsycINFO computerized databases for the period from 1995 to July 2009. The keywords for the search were: Nurs* AND (Personnel turnover OR Career Mobility). Research on nurses' organizational turnover was excluded. Review methods. An integrative literature review was carried out using Cooper's five-stage methodology provided a framework for data collection, analysis and synthesis. Results. A total of 31 studies matching the inclusion criteria were identified. Variety in samples, measurement instruments and measures of intention to leave led to difficulties when attempting to compare or generalize study findings. A number of variables influencing nurses' intention to leave the profession were identified, including demographic, work-related and individual-related variables. Conclusions. Further research is needed using sound measurement instruments, consistent measures of leaving intention and more rigorous sampling. More in-depth research is needed to give nurses opportunities to explain in their own words the reasons for their intentions to leave.

Frugier, P. (2011). "Des actions collectives pour attirer et fidéliser les professionnels de santé." *Revue hospitalière De France*(540): 41-43.

[BDSP. Notice produite par EHESP G9R0xB9E. Diffusion soumise à autorisation]. La direction générale du CHU de Limoges est consciente des enjeux liés à son attractivité dans un contexte national marqué par la pénurie de soignants et le vieillissement de la population médicale. Après avoir réalisé un tableau démographique de ses équipes, et dessiné les besoins de la population limousine dans les prochaines années, le CHU de Limoges s'applique à mener une politique d'attractivité et de fidélisation des professionnels de santé. Pour preuve : ses actions récemment conduites et l'inscription de cet objectif dans le contrat de performance, récemment signé avec l'Agence nationale d'appui à la performance et l'ARS Limousin. (R.A.).

Gaki, E., Kontodimopoulos, N. et Niakas, D. (2013). "Investigating demographic, work-related and job satisfaction variables as predictors of motivation in Greek nurses." *J Nurs Manag* **21**(3): 483-490.

<https://doi.org/10.1111/j.1365-2834.2012.01413.x>

Aim To investigate whether demographic variables and work-related factors predict work motivation in Greek nurses. **Background/** Nurses' motivation is crucial for an effective health-care system. Herzberg's and Maslow's motivation theories constitute the framework of this study. **Method** The sample consisted of 200 nurses from every sector and registration level in a University Hospital in Greece. The response rate was 76%. **Instruments :** A previously developed and validated questionnaire addressing four work-related motivators (job attributes, remuneration, co-workers and achievements) on a five-point Likert scale. **Results :** Most participants were women, married, between 36 years and 45 years old and higher education graduates. The highest mean score was recorded for achievements (mean 4.07, SD 0.72), which emerged as the most important motivator. Job satisfaction, work sector and age were statistically significantly related to motivational factors. **Conclusions** Nurses placed emphasis on motivators not strictly relating to economic rewards, but which can be seen as intrinsic and could lead to self-actualization. **Implications for nursing management** The constantly changing health sector requires that human resources and job context be a priority for health administrators. By promoting nurses' satisfaction and efficacy, an improvement in service quality is expected.

Heinen, M. M., van Achterberg, T., Schwendimann, R., et al. (2013). "Nurses' intention to leave their profession: A cross sectional observational study in 10 European countries." *International Journal of Nursing Studies* **50**(2): 174-184.

<https://www.sciencedirect.com/science/article/pii/S0020748912003306>

Background As the European population ages, the demand for nursing care increases. Yet, a shortage of nurses at the labour market exists or is predicted for most European countries. There are no adequate solutions for this shortage yet, and recruitment of future nurses is difficult. Therefore, retaining nurses for the profession is urgent. **Objective** To determine factors associated with nurses' intention to leave the profession across European countries. **Design** A multi-country, multi-centre, cross-sectional analysis of survey data. **Setting** 2025 surgical and medical units from 385 hospitals in ten European countries that participated in the RN4Cast study. **Hospital selection** was based on a stratified randomised selection procedure. **Participants** All nurses from the participating medical and surgical hospital wards received a survey. 23,159 nurses (64%) returned the survey. **Methods** The nurse survey included questions about intention to leave the profession, nurse characteristics, factors related to work environment, patient-to-nurse staffing ratio, burnout and perceived quality and safety of care. Multilevel regression analyses with 'intention to leave the profession' as dependent variable were conducted for all 10 countries combined as well as per country. **Results** Overall, 9% of the nurses intended to leave their profession. This varied from 5 to 17% between countries. Seven factors were associated with intention to leave the profession at European level: nurse-physician relationship (OR 0.86; 95%CI 0.79-0.93), leadership (OR 0.78; 95% CI 0.70-0.86), participation in hospital affairs (OR 0.68; 95%CI 0.61-0.76), older age (OR 1.13; 95%CI 1.07-1.20), female gender (OR 0.67; 95%CI 0.55-0.80), working fulltime (OR 0.76; 95%CI 0.66-0.86) and burnout (OR 2.02; 95%CI 1.91-2.14). The relevance of these factors differed for the individual countries. Nurse perceived staffing adequacy, patient-to-nurse staffing ratio, perceived quality and safety of care and hospital size were not associated with intention to leave at a European level. **Conclusion** Burnout is consistently associated with nurses' intention to leave their profession across the 10 European countries. Elements of work environment are associated with intention to leave the nursing profession but differ between countries, indicating the importance of national contexts in explaining and preventing nurses' intention to leave their profession.

Johansson, G., Sandahl, C. et Hasson, D. A. N. (2013). "Role stress among first-line nurse managers and registered nurses – a comparative study." *J Nurs Manag* **21**(3): 449-458.

<https://doi.org/10.1111/j.1365-2834.2011.01311.x>

Background Studies show that first-line nurse managers (F-LNMs) experience high psychological job demands and inadequate managerial guidance. The purpose of this study was to investigate whether F-LNMs have higher stress levels and show more signs of stress-related ill health than registered

nurses (RNs). Aim The aim of this study was to examine possible differences in self-rated health between F-LNMs and RNs on various psychosocial factors (e.g. job demand, job control and managerial support). Methods? Data were collected at a university hospital in Sweden. Sixty-four F-LNMs and 908 RNs filled in a web-based questionnaire. Results? Both F-LNMs and RNs reported having good health. Approximately 10?15% of the F-LNMs and RNs showed signs of being at risk for stress-related ill health. Statistically significant differences (Mann Whitney U-test) were found in the distribution between the F-LNMs and the RNs on three indices of job control, job demand and managerial support. Conclusion Our findings suggest that F-LNMs were able to cope with high-demand job situations because of relatively high control over work. Implication for nursing management? The implication for nursing management shows the needs for a work environment for both F-LNMs and RNs that includes high job control and good managerial support.

Khamisa, N., Peltzer, K. et Oldenburg, B. (2013). "Burnout in relation to specific contributing factors and health outcomes among nurses: a systematic review." *Int J Environ Res Public Health* **10**(6): 2214-2240.

Nurses have been found to experience higher levels of stress-related burnout compared to other health care professionals. Despite studies showing that both job satisfaction and burnout are effects of exposure to stressful working environments, leading to poor health among nurses, little is known about the causal nature and direction of these relationships. The aim of this systematic review is to identify published research that has formally investigated relationships between these variables. Six databases (including CINAHL, COCHRANE, EMBASE, MEDLINE, PROQUEST and PsYINFO) were searched for combinations of keywords, a manual search was conducted and an independent reviewer was asked to cross validate all the electronically identified articles. Of the eighty five articles that were identified from these databases, twenty one articles were excluded based on exclusion criteria; hence, a total of seventy articles were included in the study sample. The majority of identified studies exploring two and three way relationships (n = 63) were conducted in developed countries. Existing research includes predominantly cross-sectional studies (n = 68) with only a few longitudinal studies (n = 2); hence, the evidence base for causality is still very limited. Despite minimal availability of research concerning the small number of studies to investigate the relationships between work-related stress, burnout, job satisfaction and the general health of nurses, this review has identified some contradictory evidence for the role of job satisfaction. This emphasizes the need for further research towards understanding causality.

Riviere, A., Commeiras, N. et Loubes, A. (2013). "Tensions de rôle et stratégies d'ajustement : une étude auprès de cadres de santé à l'hôpital." *Journal De Gestion Et d'économie Médicales* **31**(2-3): 142-162

[BDSP. Notice produite par ORSRA BR0xkIsA. Diffusion soumise à autorisation]. Depuis ces deux dernières décennies, la modernisation du secteur hospitalier implique un nouveau mode d'organisation de l'activité (externalisation des activités de support, constitution de pôles d'activité, introduction de la tarification à l'activité.) et une nouvelle répartition des pouvoirs à l'hôpital (renforcement du poids des managers). De nouveaux modes de management ont été transposés du secteur privé avec pour objectif de perfectionner et de moderniser l'action du secteur public. Cependant, les objectifs de ces deux secteurs ne sont pas les mêmes : satisfaction de l'intérêt général pour l'un et rentabilité pour l'autre. Cette différence peut être enrichissante (exemples : émulation liée à la compétition, réalisation d'économies substantielles.), mais aussi source de résistances et de stress. Cette nouvelle gestion publique déstabilise les différents acteurs des établissements, qui doivent, à la fois, répondre aux grands principes du service public et à des logiques économiques de performance. Dans un tel contexte, des tensions de rôle peuvent-elles se développer chez le personnel soignant ? Par quels moyens serait-il possible de gérer ces tensions de rôle ? Ce travail de recherche s'intéresse tout particulièrement aux différentes stratégies d'ajustement utilisées par les cadres de santé, pour faire face aux tensions qui pourraient se développer. Pour répondre à ces questions, une étude qualitative a été réalisée auprès de cadres de santé d'un CHRU français. Les résultats révèlent que les changements vécus suite à la mise en place du Nouveau Management Public dans les hôpitaux ont modifié le rôle et les fonctions des cadres de santé. Désormais à l'interface entre une culture du soin et une culture gestionnaire, les cadres de santé se trouvent dans une position

délicate qui suscite des tensions de rôle quotidiennes. Des stratégies d'ajustement utilisées par les cadres de santé pour faire face à ces tensions de rôle ont également été identifiées.

Rodriguez, M.-P. (2013). "Les infirmières en pratiques avancées dans les services de soins." Gestions Hospitalières(528): 410-413.

[BDSP. Notice produite par EHESP 778AR0xA. Diffusion soumise à autorisation]. Ancrées dans les soins, les infirmières en pratiques avancées (IPA) jouent un rôle clé dans la coordination des soins et dans les relations avec les patients. En septembre 2011, les premières IPA sont entrées en fonction à l'Assistance Publique-Hôpitaux de Marseille. Un an après, les auteurs ont cherché à savoir si elles étaient parvenues à trouver leur place dans l'organisation des soins et à connaître les perceptions des équipes et des patients.

Galbraith, N. D. et Brown, K. E. (2011). "Assessing intervention effectiveness for reducing stress in student nurses: quantitative systematic review." J Adv Nurs **67**(4): 709-721.

AIMS: To identify the types of interventions that are effective in reducing stress in student nurses, and to make recommendations for future research. BACKGROUND: Student nurses experience significant stress during their training and this may contribute to sickness, absence and attrition. Given the global shortage of nurses and high dropout rates amongst trainees, the importance for developing stress management programmes for student nurses is becoming more evident. To date, only one review has examined the effectiveness of stress interventions for student nurses, but the emergence of recent literature warrants a new review. DATA SOURCES: Research papers published between April 1981 and April 2008 were identified from the following databases: Medline, CINAHL, Behavioral Sciences Collection, IBSS and Psycinfo. REVIEW METHODS: A quantitative systematic review with narrative synthesis was conducted. Key terms included 'nurses OR nursing OR nurse', 'student OR students', 'intervention', 'stress OR burnout'. In addition to database searches, reference lists of selected papers were scanned, key authors were contacted and manual searches of key journals were conducted. RESULTS: The most effective interventions provided skills for coping with stressful situations (typically relaxation) and skills for changing maladaptive cognitions. Interventions which promoted skills to reduce the intensity or number of stressors were also successful. In most cases, stress interventions did not improve academic performance. CONCLUSION: The design of stress interventions should be driven by theory. Future studies should focus on interface and organizational factors and the long-term benefits of interventions for student nurses are yet to be demonstrated.

Lamaurt, F., Estryn-Béhar, M., Le Moël, R., et al. (2011). "Enquête sur le vécu et les comportements de santé des étudiants en soins infirmiers." Recherche en soins infirmiers **105**(2): 44-59.
<https://www.cairn.info/revue-recherche-en-soins-infirmiers-2011-2-page-44.htm>

Une enquête a été conduite à l'initiative de la FNEI Fédération nationale des étudiants en soins infirmiers dans les Instituts de Formation en Soins Infirmiers de 6 régions françaises représentatives pour cerner les facteurs de stress ou de satisfaction des étudiants (ESI). Menée de septembre 2008 à juin 2009, elle a recueilli un taux de réponse de 71,2%. Une analyse bivariable a été conduite sur un échantillon tiré au sort de 1450 étudiants, pour déterminer les associations des facteurs de risque potentiels avec un médiocre état de santé global ou la déclaration d'un état de stress. Les étudiants sont de plus en plus nombreux à se déclarer stressés ou en mauvaise santé dès lors qu'ils avancent dans la formation. Leur hygiène de vie n'est pas satisfaisante et ne s'améliore pas avec l'augmentation de leurs connaissances au cours de leurs études : manque de sport, tabagisme, alcool, autres substances addictives... Parmi les étudiants qui déclarent un rythme de formation trop soutenu ou une formation médiocre ou mauvaise, la majorité qualifie leur état de santé de mauvais. La formation pratique reçoit également une opinion défavorable d'un quart des étudiants entrant dans la formation et de 44% des étudiants les plus avancés. L'importance de groupes de paroles, de réflexion et de libre expression joue également un rôle important dans le ressenti de la formation et influe fortement sur la notion du stress ou sur la déclaration de l'état de santé. Cette étude a permis de constater, dans le vécu de l'étudiant, l'importance de la place de l'encadrement, de l'écoute, de l'accompagnement et

du tutorat, par des infirmiers référents stables dans chaque stage. Ces aspects doivent être améliorés pour attirer et retenir des étudiants motivés.

Li, J., Galatsch, M., Siegrist, J., et al. (2011). "Reward frustration at work and intention to leave the nursing profession - Prospective results from the European longitudinal NEXT study." International Journal of Nursing Studies **48**(5):628-35

Barlet, M. et Cavillon, M. (2010). "La profession infirmière : situation démographique et trajectoires professionnelles." Série Etudes Et Recherche - Document De Travail - Drees(101)
<http://www.drees.sante.gouv.fr/IMG/pdf/serieetud101-2.pdf>

[BDSP. Notice produite par MIN-SANTE oH9C9R0x. Diffusion soumise à autorisation]. Avec près de 500 000 infirmiers en activité au 1er janvier 2009 en France, la profession infirmière est la première profession de santé en termes d'effectifs devant les médecins (209 000), les pharmaciens (73 000) et les masseurs-kinésithérapeutes (66 000). Dans les années à venir, deux phénomènes d'envergure vont renforcer le besoin en infirmiers. D'une part le vieillissement de la population et d'autre part la baisse prévisible du nombre de médecins de 10% dans les dix prochaines années. Ainsi, même si les effectifs infirmiers sont en constante augmentation, il faudra veiller à assurer l'adéquation entre offre et besoins.

Gärtner, F. R., Nieuwenhuijsen, K., van Dijk, F. J., et al. (2010). "The impact of common mental disorders on the work functioning of nurses and allied health professionals: a systematic review." Int J Nurs Stud **47**(8): 1047-1061.

OBJECTIVE: This study aims to inventory aspects of work functioning of nurses and allied health professionals that are affected by common mental disorders. DESIGN: A systematic review of psychological and occupational health literature was performed. DATA SOURCES: A sensitive systematic literature search based on index terms and text words was conducted in four electronic databases: PubMed, PsycINFO, Embase, and Cinahl. The literature search was limited to journal articles published between 1998 and 2008, written in English, German, or Dutch. REVIEW METHODS: For inclusion, studies had to examine a relationship between common mental disorders and a measure of work functioning in nurses or allied health professionals. No restrictions on study design were handled. Methodological quality was assessed for each study. The data were categorized into themes, for which the strength of evidence was assessed using six levels of evidence. RESULTS: Sixteen of 2792 studies met the inclusion criteria, of which 13 had a cross-sectional design, 1 was a vignette study, and 2 were narrative reviews. In all studies, the subjects were nurses. The retrieved aspects of sub-optimal work functioning due to common mental disorders were merged into 15 themes. Strong evidence was found for five themes: general errors, medication errors, near misses, patient safety, and patient satisfaction. Moderate evidence was found that common mental disorders are associated with complex motor skills and with general performance; while evidence for an association between common mental disorders and needle stick injuries was inconclusive. Seven themes had only narrative evidence: interpersonal behaviour, energy, focus on goals and responsibility, work speed, avoiding work while on the job, coping with emotions, and motivation. CONCLUSION: Common mental disorders were found to be associated with various impairments in work functioning in nurses, these include task-related, intrapersonal and interpersonal aspects of work. In particular, strong evidence was found for an association between common mental disorders and general errors, medication errors, near errors, patient safety, and patient satisfaction. These results provide input for preventive actions to improve both health and work functioning in health care workers.

Gibb, J., Cameron, I. M., Hamilton, R., et al. (2010). "Mental health nurses' and allied health professionals' perceptions of the role of the Occupational Health Service in the management of work-related stress: how do they self-care?" J Sch Nurs **17**(9): 838-845.

Higher rates of stress-related sickness are found in health care professionals when compared with other sectors. The annual direct cost of absence to the National Health Service is £1.7 billion.

Increased clinical demand, long hours, low staffing and a lack of support from colleagues and management are contributing to absenteeism, somatic complaints and mental health problems. Mental health work is inherently stressful and levels of work stress experienced by mental health nurses are especially high. The study investigated mental health nurses' and allied health professionals' (AHPs) awareness and knowledge of the service provided by the Occupational Health Service (OHS) and identified work-related stress and self-care strategies within these two groups. Nurses and AHP staff employed in mental health services in a Scottish health board area were invited to complete an anonymous questionnaire. Results demonstrated that staff found their contact with the OHS to be a positive experience. They considered direct patient care to be less stressful than the organizational constraints they work under, and they reported a lack of support from both their peer groups and management. There should be recognition of the increased stress that hospital-based nurses and AHPs experience. These areas should be scrutinized and reviewed further to support staff within these environments in accordance with organizational objectives.

Halayem-Dhouib, S., Zaghdoudi, L., Zremdini, R., et al. (2010). "Burnout en psychiatrie : une expérience tunisienne." *Revue d'Epidémiologie Et de Santé Publique* **58**(6): 403-408

[BDSP. Notice produite par ORSLR GBBOR0x9. Diffusion soumise à autorisation]. Le burnout est un syndrome d'épuisement professionnel, consécutif à l'exposition à un stress permanent et prolongé. Il concerne les professions à fortes sollicitations mentales, émotionnelles et affectives, et à forte responsabilité. Les personnes travaillant dans les hôpitaux psychiatriques sont des sujets particulièrement à risque. Le but de ce travail est d'évaluer le degré de burnout chez le personnel médical et paramédical dans le seul hôpital psychiatrique tunisien, ainsi que de rechercher les facteurs personnels, sociaux économiques pouvant influencer ce syndrome, et enfin d'étudier le rapport du burnout à la dépression. Il s'agit d'une étude transversale qui a évalué 105 sujets dont 54 infirmiers, 41 résidents et 11 praticiens hospitalo-universitaires, travaillant à l'hôpital psychiatrique de Tunis. Le Maslach Burnout Inventory, l'inventaire abrégé de dépression de Beck et une fiche épidémiologique ont été utilisés. La prévalence du burnout était élevée dans la population étudiée. Les infirmiers présentaient des scores élevés dans les trois dimensions : l'épuisement professionnel, la dépersonnalisation et l'accomplissement personnel avec des scores moyens respectifs de 26,18 ; 10,20 et 32,94. Les difficultés personnelles ($p=0,021$; $R=0,316$) et les scores de dépression ($p=0,000$; $R=0,565$) étaient corrélés à l'épuisement professionnel dans ce groupe. Chez les résidents prédominait l'altération du sentiment d'accomplissement personnel (score moyen : 32,56). Dans le groupe des praticiens hospitalo-universitaires les moyennes n'atteignaient le score seuil à aucune des trois dimensions. Nos résultats sont en partie comparables à ceux des études entreprises dans le milieu psychiatrique d'autres pays : le taux de burnout était élevé principalement dans le groupe des infirmiers puis des résidents. La relation entre burnout et dépression est retrouvée dans ce travail. Parmi les facteurs pouvant influencer le syndrome d'épuisement professionnel, le rôle déterminant des conditions socioéconomiques et des difficultés personnelles est retrouvé principalement dans le groupe des infirmiers. (R.A.).

Lim, J., Bogossian, F. et Ahern, K. (2010). "Stress and coping in Australian nurses: a systematic review." *Int Nurs Rev* **57**(1): 22-31.

AIM: To identify factors that contribute to stress in Australian nurses, consider the coping strategies they use and examine the effects of stressors on nurses' health and well-being. BACKGROUND: Stress is a major concern in the nursing profession with work overload, nurse shortages and high turnover rates as the common stressors. Although nursing stress has been studied extensively, there is a lack of clarity on the nursing situation in Australia. METHODS: A systematic review of the current literature was conducted on stress and coping strategies within the Australian nursing population. RESULTS: Stressors included work overload, role conflicts and experiences of aggression. Coping strategies included seeking support, problem solving and self-control. The majority of the studies reported detrimental effects on nurses' physical and mental well-being with little consideration given to the spillover effects of nursing work stress to their family and social relationships. CONCLUSION:

Recommendations included factoring in personal and work stresses, promoting the use of effective coping strategies and maintaining supportive social relationships.

Mainhagu, S. (2010). "Les soignants face à la flexibilité des effectifs." *Journal d'Economie Médicale* **28**(3-4): 114-126

[BDSP. Notice produite par ORSRA R0xo8nCl. Diffusion soumise à autorisation]. L'objectif de cet article est de décrire une pratique de gestion flexible des effectifs soignants et ses limites, en apportant un éclairage sociologique sur les rapports politiques, les oppositions culturelles et des effets de contexte, notamment sur le contenu de l'activité de travail. Cette réflexion se base sur une étude de cas longitudinale d'une clinique de court séjour française pour laquelle les modes de recueil d'informations ont été diversifiés. Les résultats révèlent des effets pervers d'une telle pratique sur les conditions de travail et la fidélisation du personnel. Les oppositions des soignants sont motivées par la défense de leur autonomie mais aussi des valeurs qui sont en rapport avec le contenu du travail. Ces mécanismes seront décrits à travers ces variables et leurs liaisons. Nous expliquons pourquoi cette pratique est rejetée lorsque la flexibilité est seulement de nature quantitative et organisationnelle, ne permettant pas les apprentissages et l'acquisition de compétences pourtant nécessaires dans ce type d'activité exercée par un personnel qualifié.

McLaughlin, K., Moutray, M. et Moore, C. (2010). "Career motivation in nursing students and the perceived influence of significant others." *J Adv Nurs* **66**(2): 404-412.

AIM: This paper is a report of a study investigating the motivation of nursing students, their reasons for entering nursing and the perceived influence of others in their decision-making. BACKGROUND: There is an abundance of research into why students drop out of nursing education, but less well-studied is their motivation for entering it in the first place. In addition, little is known about the role of significant others in their decisions. METHOD: The participants were a convenience sample of 68 undergraduate nursing students in the second year of their programme. They provided answers to essay topics and the data were analysed using the principles of grounded theory. The data were collected in 2007. FINDINGS: Whilst altruism was a major theme in the essays, the opportunities nursing presented were also deemed influential. Personal/self development was viewed as equally important as the desire to care. Family members in the healthcare profession were perceived to be great sources of both emotional and instrumental support. CONCLUSION: The diversity within nursing and the reported opportunities that nursing presents are important motivators for nursing students, and recruitment campaigns should aim to make these more explicit. There is a need for more qualitative research into indicators of successful nursing students if we are to address not only student dropout, but also to recruit those most likely to complete their education and remain in the nursing profession.

Moret, L., Tripodi, D., Jolivet, A., et al. (2010). "Linking hospital workers' organisational work environment to depressive symptoms: A mediating effect of effort-reward imbalance? The ORSOSA study." *Int J Environ Res Public Health* **71**(3): 534-540.

Few studies have analysed the association between the organisational work environment and depression in hospital workers and we still have little understanding of how processes in the practice environment are related to depressive disorders. However, individual perception of an imbalance between efforts made and expected rewards has been associated with incident depression. The main goal of this study was to test the hypothesis that some organisational constraints at the work-unit level may be related to depressive symptoms in hospital workers, either directly or through individual perceptions of effort-reward imbalance (ERI). In 2006, 3316 female registered nurses and nursing aids working in 190 work units in seven French university hospitals, recruited from the baseline screening of an epidemiological cohort study (the ORSOSA study), responded in 2006 to valid self-report questionnaires (CES-D, ERI). The organisational work environment was assessed with the self-rated Nursing Work Index - Extended Organisation (NWI-EO) aggregated at the work unit level. Multilevel models were used. We found that poor relations between workers within work units were associated

with higher CES-D score, independently of perceived ERI. Low level of communication between workers in the unit was associated with individual perceptions of ERI and indirectly associated with depressive symptoms. Understaffing and non-respect of planned days off and vacations were associated with perceived ERI but these organisational constraints were not associated with depressive symptoms. Our study allowed us to identify and quantify organisational factors that have a direct effect on hospital workers' depressive symptoms, or an indirect effect through perceived ERI. Better understanding of the effect of organisational factors on health through perceived ERI would provide targets for successful interventions. Organisational approaches may be more effective in improving mental health at work and may also have a longer-lasting impact than individual approaches.

Estryn-Béhar, M. (2008). Santé et satisfaction des soignants au travail en France et en Europe. Rennes, Presses de l'EHESP

<https://www.cairn.info/sante-et-satisfaction-des-soignants-au-travail--9782859529468.htm>

Analyser les raisons pour lesquelles les paramédicaux hospitaliers quittent prématurément leur profession et formuler des préconisations pour prévenir ce phénomène : tels étaient les buts de l'étude européenne PRESST-NEXT (Promouvoir en Europe santé et satisfaction des soignants au travail – Nurses' Early Exit Study). L'ampleur et la représentativité de l'échantillon de cette étude ont permis un traitement exhaustif des causes du mal-être des soignants. Ce mal-être n'est pas sans remèdes, lesquels ne sont pas nécessairement budgétivores. C'est ce qu'entend démontrer ici Madeleine Estryn-Béhar à partir des résultats de PRESST-NEXT. L'ouvrage est conçu pour permettre au lecteur de s'emparer aisément des éléments de diagnostic et des préconisations correspondantes. Chaque chapitre débute par un résumé des apports de la littérature scientifique et de l'étude PRESST-NEXT. Il se clôt sur un court encadré présentant des propositions concrètes pour remédier aux problèmes soulevés. Des fiches actions finales proposent des solutions applicables à l'échelon local.

Alderson, M. (2005). "Analyse psychodynamique du travail infirmier en unités de soins de longue durée : Entre plaisir et souffrance." Recherche en soins infirmiers **80**(1): 76-86.

<https://www.cairn.info/revue-recherche-en-soins-infirmiers-2005-1-page-76.htm>

Dans le contexte de stabilisation des effets de la réforme du réseau de la santé et des services sociaux au Québec, l'étude d'Alderson (2001) investigate l'expérience collective de travail d'infirmières en unité de soins de longue durée (USLD) sous l'éclairage d'un paradigme, d'une approche et d'une méthodologie différents de ceux traditionnellement privilégiés par la recherche en sciences infirmières. L'étude tente un rapprochement entre les sciences infirmières et la psychodynamique du travail (PDT) ; elle est en cela originale et novatrice. L'investigation se voit motivée par le fait que les problèmes de santé mentale des infirmières sont en constante augmentation. L'expérience de travail des infirmières rencontrées a pour majeure source de souffrance la perception de manques de reconnaissance, d'autonomie et de pouvoir professionnels. Ces manques se nourrissent dans une vaste mesure, d'une organisation inadéquate du travail infirmier. Des pistes de solution, énoncées par les participantes, visent les nécessaires transformations du travail et de son contexte.

Addictions

Medina-Martínez, J., Aliño, M., Vázquez-Martínez, A., et al. (2023). "Risk and Protective Factors Associated with Drug Use in Healthcare Professionals: A Systematic Review." *J Psychoactive Drugs* **21** : 1-15.

Healthcare professionals are exposed to stressful situations that may favor substance use vulnerability. This systematic review aims to synthesize the risk and protective factors associated with use, abuse, and dependence of alcohol, tobacco, psychoactive drugs, and cannabis in healthcare professionals. Following PRISMA recommendations, a systematic search was performed in PsycINFO, Web of Science, PubMed/MEDLINE, Embase, Scopus, and Cochrane Library. The search yielded 1523 studies, of which 19 were selected. The identified risk factors were demographic factors (i.e. male gender, and single/divorced marital status), psychopathological factors, social factors, positive attitudes toward drugs, unhealthy lifestyle habits, the COVID-19 pandemic, and the coexistence of the use of several substances. The protective factors were demographic factors (i.e. ethnicity and having dependent children), healthy lifestyle habits, and workplace anti-drug policies (i.e. restriction of tobacco use). These findings highlight the need for preventive actions against drug use in healthcare professionals to improve their health and reduce the possible negative impact on their healthcare practice. Knowledge of modifiable risk and protective factors allows their incorporation as components in preventive actions, and non-modifiable factors (e.g. demographic variables) may contribute to the detection of groups of greater vulnerability to propose selective prevention actions in this population.

Mercer, M., Stimpfel, A. W. et Dickson, V. V. (2023). "Psychosocial Factors Associated With Alcohol Use Among Nurses: An Integrative Review." *Journal of Nursing Regulation* **13**(4): 5-20.

<https://www.sciencedirect.com/science/article/pii/S2155825623000327>

Background Understanding alcohol use among nurses may inform interventions related to the coping mechanisms nurses use for workplace stress and trauma. Alcohol use can be caused by a variety of factors and has serious implications on a nurse's personal health and professional practice. Understanding psychosocial factors and preventive measures may assist in the development of interventions to improve coping mechanisms and reduce the incidence of alcohol misuse. Purpose To review the psychosocial factors and preventive measures associated with alcohol use among nurses. Methods For this integrative review, systematic searches were conducted in CINAHL, PubMed, PsychNet, and ProQuest Central. Included studies were peer-reviewed and addressed alcohol use among nurses in the United States. Articles were appraised using methods-specific tools indicated by the Whittemore and Knafl framework. Data were extracted and themes identified using constant comparison. Results Of 6,214 nonduplicate articles screened, 78 were selected for full-text review and 13 were included after application of inclusion criteria. Synthesis resulted in four themes: (1) occupational stress and trauma, (2) workplace characteristics, (3) mental health implications, and (4) protective factors. The data show that workplace stress and trauma contribute to alcohol use among nurses. Night shifts, rotating shifts, and shift length are factors related to alcohol use, as are mental health problems such as anxiety, depression, trauma, and suicide. Protective factors that reduce alcohol use among nurses include faith, resilience, and perceived organizational support. Conclusion Alcohol use among nurses presents challenges for the nursing profession and regulatory bodies with specific and interrelated phenomena related to the role and identity of nurses. A better understanding of these factors through research will facilitate a healthier nursing workforce that is better prepared to take on the rewards and challenges of a nursing career.

Searby, A., Burr, D., Taylor, G., et al. (2023). "Alcohol consumption among Australian nurses: A cross-sectional national survey study." *Collegian* **30**(3): 440-448.

Background: Nurses are the largest profession within the health workforce. Limited available literature suggests high rates of alcohol consumption may occur among Australian nurses. Aim: To determine the prevalence of high-risk alcohol consumption among Australian nurses. Methods: A cross-sectional national survey

was distributed via professional groups and social media to Australian nurses. Participants provided demographic information and completed a modified Perceptions of Work Stress Scale. The 10-item Alcohol Use Disorders Identification Test (AUDIT) was used to explore nurses' self-reported alcohol consumption. Surveys were conducted between July and October 2021. Findings: The overall prevalence of risky drinking was 36.9% among participants; 26.1% at risky or hazardous levels, 5.6% at the high-risk or harmful level, and 5.1% at high-risk, almost certainly dependent levels. Correlations between work setting, stress, and risky alcohol consumption revealed nurses working in Emergency Departments were most likely to report higher perceived stress and AUDIT scores. Discussion: The prevalence of high-risk alcohol consumption among Australian nurses was higher than previously reported. The COVID-19 pandemic emerged as a potential factor contributing to increased stress and alcohol consumption among Australian nurses. Conclusion: Given the current vulnerability in the nursing workforce, tailored interventions are urgently required to address high-risk alcohol consumption. (c) 2022 Australian College of Nursing Ltd. Published by Elsevier Ltd.

Cousin, L., Di Beo, V. et Marcellin, F. (2022). "Use of psychoactive substances by night-shift hospital healthcare workers during the first wave of the COVID-19 pandemic: a cross-sectional study based in Parisian public hospitals (ALADDIN)." *BMJ Open* **12**(3): e055699.

OBJECTIVES: This study aimed to estimate the prevalence of psychoactive substance (PAS) use in night-shift healthcare workers (NSHW) during France's first COVID-19 wave (March-May 2020). DESIGN: Observational cross-sectional online survey. SETTING: 39 public hospitals in the Assistance Publique des Hôpitaux de Paris (AP-HP) network in the Parisian area. PARTICIPANTS: A total of 1238 nurses, assistant nurses, X-ray technicians, managers, lab technicians, midwives and childcare assistants working at night or alternating between days and nights answered the questionnaire. INTERVENTION: Online survey. OUTCOME MEASURES: PAS use prevalence after weighting data for sex, age and profession using calibration on margins, in order to be representative of all AP-HP NSHW. We used the Fagerström scale and the Alcohol Use Disorders Identification Test Concise to assess PAS use. RESULTS: The weighted estimated prevalences of daily smoking, alcohol drinking and tranquilliser use in participating NSHW were 21.4, 1.3 and 2.4%, respectively. Twelve per cent (11.7%) of our study sample used opioids. During the first COVID-19 wave, PAS use remained stable except for tobacco use, with 8.6% of participants reporting an increase. Previous 3-month prevalences of tranquilliser and opioid use were significantly higher than in the general population. CONCLUSION: Daily smoking (especially in younger men) and tranquilliser and opioid use were highly prevalent in NSHW in the AP-HP network during France's first COVID-19 wave. Specific interventions for quitting smoking and addressing determinants of tranquilliser and opioid use in NSHW need to be developed and evaluated to improve quality of life in these essential, underdiagnosed and undertreated health personnel.

Trinkoff, A. M., Selby, V. L., Han, K., et al. (2022). "The Prevalence of Substance Use and Substance Use Problems in Registered Nurses: Estimates From the Nurse Worklife and Wellness Study." *Journal of Nursing Regulation* **12**(4): 35-46.
<https://www.sciencedirect.com/science/article/pii/S215582562200014X>

Background Substance use (SU) or substance use disorder (SUD) prevalence among U.S. nurses has not been assessed for almost 25 years. Purpose The purpose of this current study, known as the Nurse Worklife and Wellness Study, is to generate population-based prevalence estimates for SU and related problems, including SUDs, among registered nurses and to examine other personal and work characteristics related to nurse SU. Methods A mixed-mode survey of a nationally representative sample of randomly selected nurses in nine states, using a cross-sectional design, obtained 1,215 responses (30.6% response rate), with 1,170 usable surveys for analysis. Substance use and problems were assessed based on standardized criteria. Results Past year illicit drug use was 5.7%, and prescription-type drug misuse was 9.9%, with nurses working in home health/hospice (19%) and

nursing homes (15.8%) having the highest rates. Energy drink use was reported by 23.7% of nurses younger than 45 years, with emergency and multi-specialty nurses having three to five times the odds of use versus the reference group. Overall, 18.0% of nurses screened positive for SU problems, with one-third of those (6.6% of the total) screening positive for SUD. Staff, charge nurses/coordinators/nurse managers, and other administrators had 9 to 12 times the odds of having a SUD as opposed to educators and researchers. Conclusion Prescription-type drug misuse rates exceeded the U.S. population rates, and rates varied by specialty. Energy drink use and SUD risk were significantly higher among nurses in certain positions and specialties. Focusing on higher risk groups can help target nurse prevention and treatment efforts and guide policy for identifying and addressing SU problems among nurses. current vulnerability in the nursing workforce, tailored interventions are urgently required to address high-risk alcohol consumption.(c) 2022 Australian College of Nursing Ltd. Published by Elsevier Ltd.

Abou-ElWafa, H. S., Zoromba, M. A. et El-Gilany, A. H. (2021). "Cigarette smoking at workplace among resident physicians and nurses in Mansoura University Hospital." *Int J Nurs Pract* **76**(1): 37-44.

Smoking at workplace (WP) is common among healthcare workers. A cross-sectional study was conducted upon resident physicians and nurses to determine the prevalence of WP smoking and its associated factors. A questionnaire was used to collect socio-demographic and occupational data, smoking history, nicotine dependence, and attitude toward smoking and its control in WP. More than one-fifths (22.7%) of residents and nurses were current WP smokers. Significant independent predictors are having shift work, high nicotine dependence, and having positive attitude toward smoking with AOR (95% CI): 29.4 (4.9-177.1), 18.2 (3.3-101.1), and 0.16 (0.02-0.84), respectively. The prevalence of smoking among resident physicians and nurses in Mansoura University Hospital is relatively high. Enforcement of WP smoking-free policies is required together with encouragement of positive attitude toward smoking cessation.

Choflet, A., Davidson, J., Lee, K. C., et al. (2021). "A comparative analysis of the substance use and mental health characteristics of nurses who complete suicide." *J Clin Nurs* **30**(13-14): 1963-1972.

AIMS AND OBJECTIVES: To describe the substance use and mental health characteristics of nurses who complete suicide compared to non-nurses. BACKGROUND: Nurses are at higher risk of suicide than the general population. The relationship between substance use, mental health and suicide in a large sample of nurses in the USA has not been previously described. DESIGN: Retrospective observational quantitative analysis. METHODS: Suicide data were retrospectively analysed in the Centers for Disease Control and Prevention National Violent Death Reporting System from 2003 to 2017. Data were compared between nurses who died by suicide (n = 2,306) and non-nurses who died by suicide (n = 185,620) using odds ratios calculations and chi-square test of proportions to detect independent risk factors of suicide completion in nurses. This study followed the STROBE guidelines. RESULTS: Significant differences between nurses and non-nurses were found. Among decedents for whom substances were implicated as a cause of death, nurses were far more likely to be positive at the time of death for almost all substance classifications. Both male and female nurses were more likely than non-nurses to have a mental health problem reported. Among both female and male nurses, job problems were more prevalent compared to non-nurses (12.8% and 19.9% versus 7.2% and 11.9%, respectively). Female nurses were more likely to have a physical health problem compared to female non-nurses, male nurses and male non-nurses (26.2% versus 21.3%, 22% and 20.4%). CONCLUSION: Unique relationships between substance use and mental health exist among nurses who complete suicide which may offer specific opportunities for interventions to reduce suicide. RELEVANCE TO CLINICAL PRACTICE: Efforts to address workplace stress, facilitate self-referral for risky substance use, encourage mental health treatment and reduce the stigma associated with seeking help all offer potential interventions to reduce nurse suicide.

Coscas, S., Mahé, V., Chavignaud, I., et al. (2021). "International Multicenter Study on Drug Consumption in Nursing Students." *BMJ Open* **18**(18).

BACKGROUND: The prevalence of illicit drug use among young people is high, with many being highly vulnerable to substance abuse. The nursing profession is not immune to the impacts of substance misuse. Knowing the current levels of consumption of illicit drugs in nursing students will allow for the introduction of preventive actions. **METHODS:** Multi-center, descriptive, and cross-sectional study involving nursing schools from four different countries (Spain, Belgium, France, and Brazil). A total of seven centers participated. An adapted version of the Global School-based Student Health Survey (GSHS) was used as a tool, which selected only the module on illicit drugs. Standard logistic regression analysis was performed. **RESULTS:** A total of 496 nursing students participated in the study. Illicit drug shows positive representation among nursing students. A significant difference was observed between the gender and the age of first drug use, illicit drug consumption, cannabis use, and cocaine use ever in life, with higher use of illicit drugs by male, although at later ages than girls. The bivariate analysis, gender, problems as result of drugs, and nationality were significantly associated with the consumption of illicit drugs, cannabis, cocaine, and ecstasy ever in life. **CONCLUSIONS:** High rates of illicit drug use were found among nursing students, as well as factors that can influence consumption such as nationality or gender. These results can serve as a basis for the development of educational and policy interventions within nursing schools that are based on evidence, with significant implications for nurse educators, academic administrators, and practice.

Pougnnet, R., Chapalain, D., Fortin, C., et al. (2021). "Consommation de cigarettes et de cigarettes électroniques des étudiants en santé." *Revue des Maladies Respiratoires* **38**(2): 164-170.

<https://www.sciencedirect.com/science/article/pii/S0761842521000310>

Résumé Introduction Le tabagisme est l'une des principales causes évitables de mort dans le monde. Certaines études ont montré, chez les soignants et les étudiants en santé, des prévalences du tabagisme proches de celle de la population générale. L'objet de cet article était d'étudier la prévalence auprès des étudiants en santé (médecine, odontologie, kinésithérapie, soins infirmiers) d'une université et d'un CHRU en France. **Matériel et méthode** Il s'agissait d'une étude transversale par auto-questionnaire. Cette étude se faisait dans le cadre d'une campagne soutenue par l'Agence Régionale de Santé Bretagne. **Résultats** Le taux de participation était de 76,4 % soit 1349 répondants sur 1766 étudiants en santé interrogés. La prévalence du tabagisme était de 17,8 % et celle du vapotage de 5,6 %. Les étudiants en soins infirmiers fumaient et vapotaient plus que les étudiants des autres filières : respectivement, pour le tabagisme, 21,8 % (73/335) vs 16,5 % (167/1014) ($p < 0,001$), et, pour le vapotage, 10,4 % (35/335) vs 4,0 % (39/980) ($p < 0,001$). Les étudiants en 3e année de soins infirmiers fumaient et vapotaient significativement plus que ceux des 2 premières années ($p = 0,02$ et $p < 0,001$). **Conclusion** Le taux de tabagisme était important, mais comparable aux données concernant les étudiants de santé. Les étudiants en soins infirmiers étaient significativement plus fumeurs, notamment en dernière année. Le taux de vapotage était plus élevé que dans les autres études.

LeBlanc, A. G., Prince, S. A., Reid, R. D., et al. (2020). "Smoking behaviour among nurses in Ontario: cross-sectional results from the Champlain Nurses' Study." *Can J Public Health* **111**(1): 134-142.

OBJECTIVE: Nurses comprise the largest professional group within the Canadian health care workforce. We aimed to assess the prevalence and correlates of smoking among nurses. **METHODS:** The Champlain Nurses' Study was a multi-centre, observational study that evaluated the physical activity levels and health of hospital-based nurses. Participants completed a series of self-report questionnaires addressing a variety of health indicators including smoking status and smoking history. Multi-level modelling was used to examine variability in smoking status across hospital sites and to identify correlates of current smoking. **RESULTS:** A total of 406 nurses, from 14 urban and rural hospitals, were included in this analysis. On average, the nurses were 42.9 (standard deviation (SD), 11.9) years old, had a waist circumference of 78.7 (95% confidence interval (CI): 77.5, 80.2) cm and body mass index of 25.9 (95% CI: 25.3, 26.5) kg/m², worked in urban hospitals (81.3%), and had either a university bachelor's (46.9%) or college (39.6%) education. Most participants (92.0%) reported that they are not current smokers, 4.0% reported that they currently smoke occasionally, and 4.0% reported that they are current daily smokers. Smokers were more likely to be working in rural hospitals than urban hospitals (34.4% versus 17.4% respectively, $p = 0.018$), associated with having a

higher waist circumference (mean difference = 4.5 (SD, 2.1), $p = 0.035$), a college but not university education (71.9% versus 36.9%, respectively, $p < 0.001$), lower scores for the Barriers Specific Self-Efficacy Scale (mean difference = - 9.7 (SD, 4.6), $p = 0.038$), and higher scores for the Profile of Mood States scale (mean difference = 2.0 (SD, 3.3), $p = 0.007$). The only correlate that remained statistically significant in the final, multivariate model was marital status; however, this analysis may be underpowered. CONCLUSIONS: The prevalence of nurse smokers in our population is lower than previous estimates, and consistent with global declines in cigarette smoking. However, smoking was still prominent and associated with several other risk factors. Given the important relationship between smoking and health, and the critical role that nurses play in health care delivery, they should be an important focus for smoking cessation initiatives and other health education initiatives.

Lopez, M. T. I., Mata, G., Renghea, A., et al. (2020). "Alcohol consumption standards in a female population of nursing students." *Nutricion Clinica Y Dietetica Hospitalaria* **40**(2): 100-103.

Youth alcohol consumption as a public health problem. Objective: To describe the patterns of alcohol consumption among nursing students. Methodology: descriptive, cross-sectional study, 433, university students, undergraduate nursing course, Spain; 2015-2016, application of the AUDIT questionnaire and some questions from SIVFRENT-A, SPSS analysis. Results: 100% women, average age 21 years, 77.6% consumed alcohol in the last 12 months; 62.1% in the previous 30 days and 9.3% consumed it daily, 55.6% started drinking between 15 and 17 years. Conclusion: it is possible to describe and understand the behavior of nursing students regarding alcohol consumption, clearly addressing the issues in the scarcity of basic education for the prevention of excessive drinking and the strengthening of responsible drinking, reflected in the early onset of drinking. alcohol, a risk factor for excessive alcohol consumption in adulthood and future professional difficulties.

Nilan, K., McKeever, T. M., McNeill, A., et al. (2019). "Prevalence of tobacco use in healthcare workers: A systematic review and meta-analysis." *PLoS One* **14**(7): e0220168.

OBJECTIVES: To estimate tobacco use prevalence in healthcare workers (HCW) by country income level, occupation and sex, and compare the estimates with the prevalence in the general population. METHODS: We systematically searched five databases; Medline, EMBASE, CINHAL Plus, CAB Abstracts, and LILACS for original studies published between 2000 and March 2016 without language restriction. All primary studies that reported tobacco use in any category of HCW were included. Study extraction and quality assessment were conducted independently by three reviewers, using a standardised data extraction and quality appraisal form. We performed random effect meta-analyses to obtain prevalence estimates by World Bank (WB) country income level, sex, and occupation. Data on prevalence of tobacco use in the general population were obtained from the World Health Organisation (WHO) Global Health Observatory website. The review protocol registration number on PROSPERO is CRD42016041231. RESULTS: 229 studies met our inclusion criteria, representing 457,415 HCW and 63 countries: 29 high-income countries (HIC), 21 upper-middle-income countries (UMIC), and 13 lower-middle-and-low-income countries (LMLIC). The overall pooled prevalence of tobacco use in HCW was 21%, 31% in males and 17% in females. Highest estimates were in male doctors in UMIC and LMLIC, 35% and 45%, and female nurses in HIC and UMIC, 21% and 25%. Heterogeneity was high ($I^2 > 90\%$). Country level comparison suggest that in HIC male HCW tend to have lower prevalence compared with males in the general population while in females the estimates were similar. Male and female HCW in UMIC and LMLIC tend to have similar or higher prevalence rates relative to their counterparts in the general population. CONCLUSIONS: HCW continue to use tobacco at high rates. Tackling HCW tobacco use requires urgent action as they are at the front line for tackling tobacco use in their patients.

Edwards, R., Tu, D., Stanley, J., et al. (2018). "Smoking prevalence among doctors and nurses-2013 New Zealand census data." *J Clin Nurs* **131**(1471): 48-57.

AIMS: To examine recent smoking trends among doctors and nurses in New Zealand. METHODS: Analysis of smoking prevalence in the 2013 New Zealand Census and comparison with previous census

data. RESULTS: The 2013 census included 7,065 male and 5,619 female doctors, and 2,988 male and 36,138 female nurses. Non-response to smoking questions was less than 3%. In 2013, 2% of male and female doctors and 9% of male and 8% of female nurses were regular cigarette smokers. This compared with 4% male and 3% female doctors, and 20% male and 13% female nurses in 2006. Psychiatric nurses had the highest smoking prevalence (15% male, 18% female). More Māori doctors (6.8%) and nurses (19.3%) smoked. Around 96% of young (<25 years) doctors and 87% of young nurses had never been regular smokers. CONCLUSIONS: By 2013, New Zealand doctors had achieved the Smokefree 2025 goal of minimal (<5%) smoking prevalence and all nurses except psychiatric nurses were on track to do so. This suggests smokefree cultures can be established among substantial occupational groups. However, smoking among Māori nurses was relatively high. Targeted workplace smoking cessation support may be an efficient means to reduce smoking among key occupational groups, and may help reduce population smoking prevalence.

Antunes Lima, M. E. (2017). Les substances psychoactives au travail : de l'usage fonctionnel à l'addiction. In : [Crespin, R ; et al. *Se doper pour travailler*] Toulouse ; Érés: 189-203.
<https://www.cairn.info/se-doper-pour-travailler--9782749254593-page-189.htm>

Cet ouvrage collectif qui associe universitaires, chercheurs, syndicaliste et acteurs du soin et de la prévention entend éclairer sous un nouveau jour les liens multiples entre travail, usages de substances psychoactives, santé, prévention et action publique. A contrario des ouvrages qui privilégient le repérage, le dépistage et le soin des personnes usant ou abusant de substances psychoactives, cet ouvrage collectif entend éclairer les fonctions professionnelles de ces usages de produits, licites ou illicites. Il entend rompre avec la tendance dominante à assimiler usage et conduite addictive, et remet en cause nombre d'affirmations répétées telles que « ces consommations sont risquées pour la santé et la sécurité », « elles nuisent à la production »... Tout au contraire, les auteurs montrent qu'elles peuvent prévenir d'autres risques au travail, et être, dans certaines conditions, des instruments de la production.

Crespin, R., Lhuillier, D. et Lutz, G. (2017). *Se doper pour travailler*. Toulouse, Érés
<https://www.cairn.info/se-doper-pour-travailler--9782749254593.htm>

Cet ouvrage collectif qui associe universitaires, chercheurs, syndicaliste et acteurs du soin et de la prévention entend éclairer sous un nouveau jour les liens multiples entre travail, usages de substances psychoactives, santé, prévention et action publique. A contrario des ouvrages qui privilégient le repérage, le dépistage et le soin des personnes usant ou abusant de substances psychoactives, cet ouvrage collectif entend éclairer les fonctions professionnelles de ces usages de produits, licites ou illicites. Il entend rompre avec la tendance dominante à assimiler usage et conduite addictive, et remet en cause nombre d'affirmations répétées telles que « ces consommations sont risquées pour la santé et la sécurité », « elles nuisent à la production »... Tout au contraire, les auteurs montrent qu'elles peuvent prévenir d'autres risques au travail, et être, dans certaines conditions, des instruments de la production.

Duaso, M. J., Bakhshi, S., Mujika, A., et al. (2017). "Nurses' smoking habits and their professional smoking cessation practices. A systematic review and meta-analysis." *Int J Nurs Stud* **67**: 3-11.

BACKGROUND: A better understanding of whether nurses' own smoking behaviours influence their engagement with smoking cessation interventions is needed. AIM: To establish whether the smoking status of nurses is associated with their professional smoking cessation practices. METHODS: Twelve electronic databases covering English and Spanish language publications from 01 Jan, 1996 to 25 Mar, 2015 were systematically searched. Studies were included if they reported nurses' smoking cessation practices in relation to their personal smoking habits. Proportions of nurses' smoking status and smoking cessation practices were pooled across studies using random effects meta-analysis. RESULTS: Fifteen studies were included in this systematic review. Levels of reported smoking cessation interventions were generally low across the studies. The meta-analyses suggested that nurses' personal smoking status was not associated significantly with nurses always asking patients about

their smoking, but nurses who smoked were 13% less likely to advise their patients to quit and 25% less likely to arrange smoking cessation follow-up. More intense interventions (assessing motivation and assisting) were not significantly associated with the smoking status of the nurse. CONCLUSIONS: The smoking status of nurses appears to have a negative impact in the delivery of smoking cessation practices. The overall level of nurses' engagement with the delivery of smoking cessation interventions requires attention if nurses are to be effective agents of smoking cessation.

Lutz, G. (2017). Les fonctions professionnelles des consommations de substances psychoactives. In : [Crespin, R ; et al. *Se doper pour travailler*] : 205-223.

<https://www.cairn.info/se-doper-pour-travailler--9782749254593-page-205.htm>

Cet ouvrage collectif qui associe universitaires, chercheurs, syndicaliste et acteurs du soin et de la prévention entend éclairer sous un nouveau jour les liens multiples entre travail, usages de substances psychoactives, santé, prévention et action publique. A contrario des ouvrages qui privilégient le repérage, le dépistage et le soin des personnes usant ou abusant de substances psychoactives, cet ouvrage collectif entend éclairer les fonctions professionnelles de ces usages de produits, licites ou illicites. Il entend rompre avec la tendance dominante à assimiler usage et conduite addictive, et remet en cause nombre d'affirmations répétées telles que « ces consommations sont risquées pour la santé et la sécurité », « elles nuisent à la production »... Tout au contraire, les auteurs montrent qu'elles peuvent prévenir d'autres risques au travail, et être, dans certaines conditions, des instruments de la production.

Strobbe, S. et Crowley, M. (2017). "Substance Use Among Nurses and Nursing Students: A Joint Position Statement of the Emergency Nurses Association and the International Nurses Society on Addictions." *J Addict Nurs* **28**(2): 104-106.

Alcohol and other substance use by nurses potentially places patients, the public, and nurses themselves at risk for serious injury or death. Nursing students are also at risk for problems related to substance use. When viewed and treated as a chronic medical illness, treatment outcomes for substance use disorders are comparable with those of other diseases and can result in lasting benefits. Professional monitoring programs that employ an alternative-to-discipline approach have been shown to be effective in the treatment of health professionals with substance use disorders and are considered a standard for recovery, with high rates of completion and return to practice. It is the position of the Emergency Nurses Association and the International Nurses Society on Addictions that 1. health care facilities provide education to nurses and other employees regarding alcohol and other drug use and establish policies, procedures, and practices to promote safe, supportive, drug-free workplaces; 2. health care facilities and schools of nursing adopt alternative-to-discipline approaches to treating nurses and nursing students with substance use disorders, with stated goals of retention, rehabilitation, and reentry into safe, professional practice; 3. drug diversion, in the context of personal use, is viewed primarily as a symptom of a serious and treatable disease and not exclusively as a crime; and 4. nurses and nursing students are aware of the risks associated with substance use, impaired practice, and drug diversion and have the responsibility and means to report suspected or actual concerns.

Neall, R. A., Atherton, I. M. et Kyle, R. G. (2016). "Nurses' health-related behaviours: protocol for a quantitative systematic review of prevalence of tobacco smoking, physical activity, alcohol consumption and dietary habits." *J Adv Nurs* **72**(1): 197-204.

Aim. To enumerate nurses' health-related behaviour by critically appraising studies on tobacco smoking, physical activity, alcohol consumption and dietary habits. Background. Nurses represent the largest occupational group in healthcare systems internationally and have an established and expanding public health role. Nurses own health-related behaviour is known to impact nurses' ability and confidence to engage in health promotion, and how patients receive and respond to advice and guidance nurses' give. However, there has been no comprehensive and comparable assessment of evidence on nurses' health-related behaviours. Design. Quantitative systematic review of prevalence

of tobacco smoking, physical activity, alcohol consumption and dietary habits. Methods. Systematic searches for literature published between January 2000 and February 2015 and indexed in Medical Literature Analysis and Retrieval System, Cumulative Index to Nursing and Allied Health Literature and Psychological Information. Eligibility criteria will be applied to titles and abstracts by two reviewers independently. Full text will be reviewed and the same criteria and process applied. Two reviewers will independently assess study quality guided by the Joanna Briggs Institute handbook for the systematic review of prevalence and incidence data. Discrepancies in eligibility or quality assessment will be resolved through discussion and, where required, a third reviewer. Data synthesis will be conducted and findings reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses checklist. Discussion. Enumerating prevalence of nurses' health-related behaviours is crucial to direct future research, inform public health policy, particularly around health promotion and to better support the nursing workforce through the development of behaviour change interventions.

Chandrakumar, S. et Adams, J. (2015). "Attitudes to smoking and smoking cessation among nurses." Nurs Stand **30**(9): 36-40.

This article presents a literature review on smoking rates among nurses and the nursing role in promoting smoking cessation worldwide. Findings included wide variations between countries in smoking rates among nurses, and the important influence of peers and family members on smoking behaviours. Several studies indicated that nurses would value more education on techniques to promote smoking cessation.

Sotos, J. R., Gonzalez, A. L., Martinez, I. P., et al. (2015). "Prevalence of hazardous drinking among nursing students." J Adv Nurs **71**(3): 581-590.

Aims. To estimate the frequency of alcohol consumption among nursing students and describe their behaviour patterns in relation to excessive consumption. Background. Most alcohol-related problems appear in individuals who indulge in hazardous consumption, with hazardous drinkers constituting a priority in the field of preventive activities. According to previous studies, there is a high proportion of hazardous drinkers among university students. Design. Descriptive cross-sectional study. Methods. Over the course of the 2012-2013 academic year, we assessed 1060 nursing degree students, ascertaining their socio-demographic characteristics, lifestyle and alcohol consumption by means of the Systematic Alcohol Consumption Interview (Interrogatorio Sistematizado de Consumos Alcoholicos/ISCA) and Alcohol Use Disorders Inventory Test (AUDIT). Results. Hazardous alcohol consumption was observed in 43.4% of students. Moreover, 14.9% of men and 18.7% of women met criteria for hazardous drinkers, without any statistically significant difference between the sexes. The frequency of hazardous drinkers was significantly higher among participants aged under 21 years, those living outside the family nucleus and smokers. Conclusion. A considerable proportion of students show evidence of hazardous alcohol consumption and, while there are no sex-related differences, the proportion of hazardous drinkers tends to be higher among the youngest subjects, smokers and persons living outside the family nucleus. Alcohol-prevention activities should envisage greater protection of university settings, particularly where future health professionals are involved.

Bakhshi, S. et While, A. E. (2014). "Health Professionals' Alcohol-Related Professional Practices and the Relationship between Their Personal Alcohol Attitudes and Behavior and Professional Practices: A Systematic Review." Int J Environ Res Public Health **11**(1): 218-248.

Health professionals' personal health behaviors have been found to be associated with their practices with patients in areas such as smoking, physical activity and weight management, but little is known in relation to alcohol use. This review has two related strands and aims to: (1) examine health professionals' alcohol-related health promotion practices; and (2) explore the relationship between health professionals' personal alcohol attitudes and behaviors, and their professional alcohol-related health promotion practices. A comprehensive literature search of the Cochrane Library, MEDLINE, EMBASE, PsycINFO, CINAHL, British Nursing Index, Web of Science, Scopus and Science Direct (2007-2013) identified 26 studies that met the inclusion criteria for Strand 1, out of which six were analyzed

for Strand 2. The findings indicate that health professionals use a range of methods to aid patients who are high-risk alcohol users. Positive associations were reported between health professionals' alcohol-related health promotion activities and their personal attitudes towards alcohol ($n = 2$), and their personal alcohol use ($n = 2$). The findings have some important implications for professional education. Future research should focus on conducting well-designed studies with larger samples to enable us to draw firm conclusions and develop the evidence base.

Stamatopoulou, E., Stamatiou, K., Vouliti, S., et al. (2014). "Smoking behavior among nurses in rural Greece." *Workplace Health Saf* **62**(4): 132-134.

Evidence suggests that rural health care providers may be at increased risk for tobacco addiction. Few researchers have studied the habitual use of tobacco in rural Greece and no published studies have examined sustained tobacco use by nurses working in these areas or their knowledge and attitudes toward smoking cessation. To explore the above, the authors conducted a questionnaire-based study in 40 health centers in rural mainland and island Greece. Two hundred twenty nurses were surveyed (65% response rate). Thirty-two percent of the nurse respondents were smokers, 54% were non-smokers, and 14% were former smokers. Only 8% of respondents had been trained to assist clients with smoking cessation.

Fathallah, N., Maurel-Donnarel, E., Baumstarck-Barrau, K., et al. (2012). "Three-year follow-up of attitudes and smoking behaviour among hospital nurses following enactment of France's national smoke-free workplace law." *Int J Nurs Stud* **49**(7): 803-810.

OBJECTIVE: This study evaluated among hospital nurses the smoking status, knowledge and attitudes regarding smoking cessation services, and smoking behaviour 3 years after the implementation of smoke-free workplace law (decree no. 2006-1386). **METHODS:** A descriptive study was undertaken in a public referral hospital in the South of France. Between February and April 2010, a questionnaire was distributed to the nurses. Data on demographic information, smoking status, behaviour and attitudes regarding smoking addiction, and knowledge regarding smoking cessation services were collected. Changes in nurses' smoking habits were studied through a former study conducted in this hospital a year after the law had come into effect. **RESULTS:** Three years after the enactment of the smoking ban, 30% (30% in 2008) reported themselves as current smokers, 26% (25% in 2008) as ex-smokers and 44% (45% in 2008) as non-smokers. Among smokers, 72% (68% in 2008) declared they had decreased tobacco consumption during working hours and 50% (29% in 2008) daily cigarette consumption. The majority of nurses (88%) supported the smoke-free law. A higher percentage of smokers than non smokers have knowledge of smoking cessation services. The smoking prevalence among hospital nurses seemed to have remained constant between 2008 and 2010 despite a better compliance with the law. **CONCLUSIONS:** France's national smoke-free workplace law is associated with a reduction in tobacco consumption and exposure to second-hand smoke in nurses but not smoking prevalence. The other measures of the MPOWER package have to be reinforced.

Schluter, P. J., Turner, C. et Benefer, C. (2012). "Long working hours and alcohol risk among Australian and New Zealand nurses and midwives: a cross-sectional study." *Int J Nurs Stud* **49**(6): 701-709.

BACKGROUND: The relationship between long working hours and harmful alcohol consumption reported in the literature is equivocal. **OBJECTIVE:** This study aimed to investigate this relationship in a methodologically rigorous fashion. **DESIGN AND PARTICIPANTS:** A cross-sectional analysis of a large cohort study of Australian and New Zealand nurses and midwives was undertaken. **METHODS:** Psychometrically robust standardised assessments of alcohol consumption and problems and other key variables were elicited using an electronic survey. Crude and adjusted logistic regression models using complete case and multistage multiple imputed data were employed. **RESULTS:** The study included 4419 participants, 3552 from Australia and 867 from New Zealand. Long working hours were common, with 33.2% working 40-49 h/week and 7.5% working ≥ 50 h/week. Overall, 13.9% engaged in harmful daily drinking. Significant associations between long working hours and harmful daily alcohol consumption was seen in crude and adjusted complete case and imputed logistic regression models.

In the adjusted model with imputed data, the odds of harmful daily drinking increased by 1.17 (95% confidence interval: 1.01, 1.36) between <40 h/week and 40-49 h/week groups, and between 40-49 h/week and ≥50 h/week groups. CONCLUSIONS: Many nurses and midwives engaging in harmful daily drinking and work long hours. Since the late 1970s, the average hours worked by full-time employees in Australia has increased. Unless these long working hours can be curbed, workforce policies and programmes aimed at prevention, supportive and empathetic intervention, and recovery need to be instigated; both to protect patients and the nurses and midwives themselves.

Monroe, T. et Kenaga, H. (2011). "Don't ask don't tell: substance abuse and addiction among nurses." *J Clin Nurs* 20(3-4): 504-509.

AIM: The purpose of this manuscript is to illustrate the challenges faced by nurses who abuse substances and to promote international dialogue about what practitioners, administrators, health care providers and students can do when they suspect someone in the profession is abusing substances, or they may themselves be suffering from addiction. BACKGROUND: Addiction among nurses has been recognised by professionals in the field for over 100 years, and current estimates place rates of substance misuse, abuse and addiction rates as high as 20% among practicing nurses. Unfortunately, fear of punishment and discipline may keep nurses or students from asking for help for themselves or from reporting a colleague or friend who is in need of help. DESIGN: Discursive paper. METHOD: This paper synthesises the results of three previous papers conducted on substance abuse policies in the nursing profession. In the first paper, the authors reviewed the history of addiction in nursing and compared disciplinary and alternative-to-discipline policies. The second focused on the development of an alternative-to-dismissal policy for substance abuse in a school of nursing and using telephone and email interviews, and the final paper reported findings of what types of policies seem to be working to retain and rehabilitate nurses who suffer from addiction in the USA. Lastly, this paper introduces international policy for nurses with addictions. CONCLUSIONS: Poor or ineffective policies that mandate punitive action endanger the public by making it difficult for impaired students or professionals to ask for help. Providing early intervention and assistance is essential in helping colleagues and students recover from an addictive disorder and providing a non-punitive atmosphere of support may well be a life-saving first step for nurses and those in their care. Many territories and countries throughout the world now offer confidential, non-punitive, assistance for nurses suffering from addictions. RELEVANCE TO CLINICAL PRACTICE: Recognition of a colleague's need of treatment is the important first step in the rehabilitation process. Early intervention and assistance are essential for helping colleagues and students to recover from an addictive disorder and providing a confidential, non-punitive atmosphere of support may well be a life-saving first step for nurses and those in their care.

Perdikaris, P., Kletsios, E., Gymnopoulos, E., et al. (2010). "The relationship between workplace, job stress and nurses' tobacco use: a review of the literature." *Int J Environ Res Public Health* 7(5): 2362-2375.

The aim of this study was to provide a summary of the existing published knowledge on the possible relationship between the workplace as a stressor factor and nurses' tobacco use. A systematic review of the literature from 1995 to 2009, using the MEDLINE database took place. Studies, that referred to nurses' smoking habit exclusively or as a part of the study, were included in the review. 491 studies were retrieved and their titles/abstracts were examined systematically. Twenty one studies were retrieved for further consideration by a comprehensive literature review. Ten studies fulfilled the eligibility criteria and they were examined further. There is a conflict on the possible relationship between workplace as a stressor factor and nurses' smoking habits, because there is no evidence on if the nurses' work environment causes smoking initiation.

Alberdi-Erice, M. J., Huizi-Egilegor, X., Barandiaran-Lasa, M., et al. (2007). "Trends in smoking and alcohol consumption among nursing students." *Enfermeria Clinica* 17(2): 63-70.

Objective. To determine trends in smoking and alcohol consumption, as well as risk behaviors associated with alcohol and driving, among nursing students throughout the diploma in nursing.

Method. A longitudinal epidemiological study was performed in a cohort of 81 nursing students of the San Sebastian School of Nursing. Data were collected using a self-administrated, bilingual (Spanish-Basque) questionnaire completed voluntarily and anonymously. The questionnaire was distributed in one of the most highly attended lectures. **Results.** Ninety-one percent of the cohort (71 students) were women. The percentage of current smokers (25%, 26.7% and 26.9%) and current drinkers (70.4%, 69.7% and 69.6%) showed no change during the 3-year diploma. The percentage of students at risk of an alcohol-related traffic accident was very high and increased during the course (from 32.3% in the first year to 45% in the third). **Conclusions.** The present study identifies unhealthy habits and behaviors that do not improve during the diploma in nursing, suggesting that nursing studies do not always help to encourage healthy habits. Therefore, health education programs should be developed to promote healthy habits and lifestyles.

Impact du covid-19 sur la santé mentale

Credland, N., Griffin, M., Hamilton, P., et al. (2024). "The impact of COVID-19 on mental health and well-being in critical care nurses - a longitudinal, qualitative study." *Nurs Crit Care*. **29**(1):32-39

BACKGROUND: The COVID-19 pandemic has had both a psychological and physiological effect on the human race. For those working in health care, particularly in critical care, the pandemic has put unprecedented strain on staff. Witnessing suffering during crisis in an organizational setting can be a traumatic experience and critical care nurses often risked, not only their own lives, but their psychological well-being, so that those infected with the virus might have a better chance at survival. **AIMS:** The aim of this study was to explore the challenges to mental health and psychological well-being experienced by Critical Care Nurses during the COVID-19 pandemic. **STUDY DESIGN:** A longitudinal, qualitative study involving semi-structured interviews with 54 critical care nurses across 38 hospitals in the United Kingdom and Ireland. Interviews were transcribed verbatim and analysed using thematic analysis. **RESULTS:** Four key themes were identified which represent the challenges faces by critical care nurses during the COVID-19 pandemic: Lack of control, Psychological trauma, Unexpected leadership, Public-political betrayal. **CONCLUSION:** While public-political praise may lead to a short-term lift in morale for front line workers; where it is not accompanied by practical support in terms of appropriate equipment, leadership, emotional support and remuneration it is likely to be damaging in the longer term. **RELEVANCE TO CLINICAL PRACTICE:** This study has provided a greater understanding of the factors which affected the well-being and mental health of critical care nurses during a global pandemic.

Kalb, G. et Meekes, J. (2024). Nursing Before and After Covid-19: Outflows, Inflows and Self-employment. Melbourne, Melbourne Institute [Melbourne Institute Working Paper 01/24](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4709567)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4709567

We study nurses' labour dynamics in light of continuing nurse shortages and the COVID-19 pandemic. Using Dutch monthly administrative microdata, all nursing-qualified persons observed in January 2016 and/or in January 2020 are compared and followed for one year before and three years after both baseline months. Compared to the 2016 Cohort, women and men in the 2020 Cohort who were employed in the healthcare sector at baseline were 0.3 and 1 percentage point more likely to have left employment; and, conditional on still being employed, 0.8 and 1.2 percentage points more likely to have left healthcare employment after three years. The 2020 Cohort women and men were also 1 and 1.7 percentage points more likely to transition from salaried employment to self-employment, and they reduced working hours by 0.6% and 1.5% more by December 2022. Except during COVID outbreaks, there is no higher inflow into healthcare employment by nursing-qualified women and men who were not employed in healthcare at baseline. Finally, other healthcare professionals fared better, with similar healthcare sector retention rates in 2019-2022 compared with 2015-2018. Overall, the pandemic accelerated nurse shortages through reduced retention and increased self-employment, and its impact is still felt at the end of 2022.

Liu, Z., Han, B., Jiang, R., et al. (2023). "Mental health status of doctors and nurses during COVID-19 epidemic in China." *The Lancet* **402** (10407) :1039 - 1040

Ulupinar, F. et Erden, Y. (2024). "Intention to leave among nurses during the COVID-19 outbreak: A rapid systematic review and Meta-Analysis." *J Clin Nurs*. **33**(1):393-403.

AIMS AND OBJECTIVES: The COVID-19 pandemic has caused an increase in the workload of nurses and changes in working conditions. Stress and the increase in workload during the COVID-19 pandemic had a negative effect on nurses' intention to leave. This study aimed to determine the current rate of intention to leave the job among nurses during the COVID-19 outbreak by conducting a rapid systematic review and meta-analysis. **METHODOLOGY/METHODS:** The review procedure was conducted by the PRISMA criteria. The researchers searched PubMed and Web of Science databases

for studies providing the rate of nurses' intent to leave, published until 31 December 2021. Heterogeneity was assessed using the I(2) test, and publication bias was measured by Egger's test. RESULTS: The estimated overall intent to leave the profession among nurses during the COVID-19 pandemic was 31.7% (95% CI: 25%-39%) with significant heterogeneity (Q test: 188.9; $p = 0.0001$; I(2) : %95.2; Tau(2) : 0.225). Additionally, Egger's regression test suggested no publication bias for estimating the pooled rate of nurses' intent to leave during the COVID-19 outbreak. NO PATIENT OR PUBLIC CONTRIBUTION: Since the research is a meta-analysis study, a literature review model was used. Ethics committee approval was not obtained because the literature review did not directly affect humans and animals. CONCLUSION: This study showed that approximately one-third of nurses working during the COVID-19 pandemic had thoughts about intending to leave their job. The findings indicate the need for strategies involving precautions and solutions to minimise the psychological impacts of COVID-19 among nurses. RELEVANCE TO CLINICAL PRACTICE: In this period when the global nurse crisis exists, it is of great importance for institutions to retain their nurse workforce. There is an urgent need to prepare nurses to cope better with COVID-19 pandemic. Identification of risk factors for intention to leave could be a significant weapon giving nurses and healthcare systems the ability to respond in a better way against the following COVID-19 waves in the near future.

Binquet, C., Quenot, J. P., Azizkhani, R., et al. (2023). "Quality of Professional Life and Its Association with Emotional Well-Being among COVID-19 Physicians and Nurses." *PLoS One* **12**: 1.

BACKGROUND: The present study was to compare the professional quality of life (ProQOL) and its association with the emotional well-being among the physicians and nurses in contact with COVID-19 patients in Iran and France. MATERIALS AND METHODS: The study was performed on 903 nurses and physicians in contact with COVID-19 patients in Iran and France. The subjects completed their demographics online and then answered questions addressing their job stress and emotion associated with their contact with COVID-19 patients and ProQOL. Finally, the collected data were analyzed using the SPSS software (ver. 25). RESULTS: According to the results of the present study, the degree of contact with COVID-19 patients had a significant role in compassion satisfaction, burnout, and compassion fatigue, with the coefficient effects of 0.459, 0.688, and 0.433, respectively ($P < 0.05$). The emotional well-being had a significant role in increasing compassion satisfaction ($B = 0.505$, $P < 0.05$). CONCLUSION: According to the results of the present study, factors such as contact with a COVID-19 patient, emotional well-being, gender, and marital status had a significant effect on dimensions of ProQOL in both Iran and France. Considering that the entire focus of the physicians and nurses is on the health of COVID-19 patients and they have no concentration on improving their emotional state, it seems that supporting them in terms of psychological self-care and considering its indirect impact on the quality of professional performance are of particular significance.

Boston-Leary, K. et Duarte, M. L. C. (2023). "The mental health of nurses who are women and mothers during the COVID-19 pandemic." *Worldviews Evid Based Nurs* **44**: e20220006.

OBJECTIVE: To reflect on the mental health of nurses who are women and mothers in the context of the COVID-19 pandemic. METHOD: Theoretical-reflective study based on scientific literature, supported by national and international scientific literature, in addition to a critical analysis by the authors. RESULTS: Reflections on the subject go beyond the impact of motherhood on these women's lives, as it portrays a gender issue and the role of women within society. The stress of working on the frontlines of a pandemic, added to the demands of children and housework, can trigger exhaustion and mental health repercussions. CONCLUSION: Workers must seek individual measures and health managers must enable collective strategies in the work environment of the institutions, proposing public policies that make both employers, workers and their families co-responsible.

Byrne, J.-P., Humphries, N., McMurray, R., et al. (2023). "COVID-19 and healthcare worker mental well-being: Comparative case studies on interventions in six countries." *Health Policy* **135**: 104863.
<https://www.sciencedirect.com/science/article/pii/S0168851023001483>

Healthcare worker (HCW) mental well-being has become a global public health priority as health systems seek to strengthen their resilience in the face of the COVID-19 pandemic. Analysing data from the Health System Response Monitor, we present six case studies (Denmark, Italy, Kyrgyzstan, Lithuania, Romania, and the United Kingdom) as a comparative review of policy interventions supporting HCW mental health during the pandemic. The results illustrate a wide range of interventions. While Denmark and the United Kingdom built on pre-existing structures to support HCW mental wellbeing during the pandemic, the other countries required new interventions. Across all cases, there was a reliance on self-care resources, online training tools, and remote professional support. Based on our analysis, we develop four policy recommendations for the future of HCW mental health supports. First, HCW mental health should be seen as a core facet of health workforce capacity. Second, effective mental health supports requires an integrated psychosocial approach that acknowledges the importance of harm prevention strategies and organisational resources (psychological first aid) alongside targeted professional interventions. Third, personal, professional and practical obstacles to take-up of mental health supports should be addressed. Fourth, any specific support or intervention targeting HCW's mental health is connected to, and dependent on, wider structural and employment factors (e.g. system resourcing and organisation) that determine the working conditions of HCWs.

Chen, H. J. et Liao, L. L. (2023). "Burnout and Mental Health and Well-Being of School Nurses After the First Wave of the COVID-19 Pandemic: A National Cross-Sectional Survey." *J Sch Nurs* **39**(2): 125-132.

The aim of this study was to examine the associations between job stressors, COVID-19-related concerns, burnout, and mental health and well-being among school nurses, and whether any of these associations are mediated by burnout. Based on stratified proportional sampling, data collection was conducted by an online questionnaire distributed to 600 school nurses in Taiwan. A total of 256 participants aged between 27 and 62 years (mean = 47.08; standard deviation = 7.28) returned questionnaires. Results showed that burnout was the main mediating variable that fully mediated the relationship between COVID-19-related concerns and mental health and well-being. The effects of job stressors on mental health and well-being included direct negative effects ($\beta = -.29$) and indirect negative effects ($\beta = -.67$) through mediating factors. School health managers should be more aware of burnout and mental health and well-being among school nurses under the impact of COVID-19.

Chong, Y. Y., Frey, E., Chien, W. T., et al. (2023). "The role of psychological flexibility in the relationships between burnout, job satisfaction, and mental health among nurses in combatting COVID-19: A two-region survey." *J Nurs Scholarsh*. **55**(5):1068-1081

BACKGROUND: A growing body of evidence suggests that the COVID-19 pandemic is adversely impacting the mental health and well-being of frontline nurses worldwide. It is therefore important to understand how such impact can be mitigated, including by studying psychological capacities that could help the nurses regulate and minimize the impact. **AIM:** To examine the role of psychological flexibility in mitigating the adverse impacts of burnout and low job satisfaction on mental health problems (i.e., anxiety, depression, and stress) and well-being among the frontline nurses in Hong Kong and Switzerland during the COVID-19 pandemic. **DESIGN:** Cross-sectional, two-region survey study. **METHOD:** Four hundred fifty-two nurses from Hong Kong ($n = 158$) and Switzerland ($n = 294$) completed an online survey. An adjusted structured equation model was used to examine the interrelationship of the constructs. **RESULTS:** Psychological flexibility was found to partially mediate the effects of job satisfaction on mental well-being ($\beta = 0.32$, 95% CI [0.19, 0.57], $p = 0.001$) and mental health problems ($\beta = -0.79$, 95% CI [-1.57, -0.44], $p = 0.001$), respectively. Similarly, this partial mediation was found in the effects of burnout on mental well-being ($\beta = -0.35$, 95% CI [-0.89, -0.15], $p = 0.002$) and mental health problems ($\beta = 0.89$, 95% CI [0.48, 3.65], $p = 0.001$). **CONCLUSION:** Psychological flexibility could be a crucial psychological resilience factor against the adverse impact of nurses' burnout on their mental health problems and well-being during COVID-19. **CLINICAL RELEVANCE:** Organizational measures should focus on fostering psychological flexibility in nurses through highly accessible, brief psychotherapeutic interventions, such as Acceptance and Commitment Therapy, to reduce the impact on mental health.

Downey, E., Fokeladeh, J. S. et Catton, H. (2023). What the Covid-19 pandemic has exposed the findings of five global health workforce professions. Human Resources for Health Observer Series ; 28. Genève OMS
<https://www.who.int/publications/i/item/9789240070189>

This report reveals the extent of the physical and psychological damage done to healthcare professionals during the Covid-19 pandemic because the health systems they worked in failed to protect them. It pulls together evidence of the impact of the pandemic from the WHPA's five members, FDI World Dental Federation, the International Pharmaceutical Federation (FIP), the International Council of Nurses (ICN), World Physiotherapy and the World Medical Association (WMA), which in total represent 41 million healthcare professionals.

García-Vivar, C., Rodríguez-Matesanz, I., San Martín-Rodríguez, L., et al. (2023). "Analysis of mental health effects among nurses working during the COVID-19 pandemic: A systematic review." J Psychiatr Ment Health Nurs **30**(3): 326-340.

What is known on the subject?: Working on the frontline during the pandemic has had a negative impact on the mental health of health professionals. A significant proportion experienced anxiety, insomnia, posttraumatic stress or depression. WHAT THE PAPER ADDS TO EXISTING KNOWLEDGE?: Analysis and synthesis of the evidence of the impact of the COVID-19 pandemic on the mental health of nurses based on their work context. There exists a gap in the literature as no studies were found that analysed the effects on nurses' mental health according to the level of care they worked in (hospital-primary care-nursing home). WHAT ARE THE IMPLICATIONS FOR PRACTICE?: There is an urgent need to assess and respond to the impact of COVID-19 on the physical and mental well-being of nurses, and to monitor international policies for the improvement of nurses' working conditions. ABSTRACT: Introduction Health professionals have suffered negative consequences during the COVID-19 pandemic. No review has specifically addressed the impact of the pandemic on the mental health of nurses exclusively according to the work context. Aim To analyse the impact of the COVID-19 pandemic on the mental health of nurses who have worked in hospitals, primary care centres and social health centres. Method PubMed, CINAHL, PsychINFO and Cochrane databases were searched (Prospero number: CRD42021249513). Out of 706 papers, 31 studies (2020-2021) were included in the systematic review. A qualitative synthesis method was used to analyse the data. Results Most studies were conducted in hospitals or frontline settings. The prevalence of moderate-to-severe symptoms was for anxiety 29.55%, depression 38.79%, posttraumatic stress disorder 29.8%, and insomnia 40.66%. Discussion This review highlights the mental health effects among nurses working in acute hospital settings. It also evidences a data gap on mental health effects among nurses working in primary health care and in nursing homes. Implications for practice In the post phase of the pandemic, there is an urgent need to assess and respond to the impact on the mental well-being of nurses, and to monitor international policies for the improvement of nurses' working conditions.

Ghahramani, S., Kasraei, H., Hayati, R., et al. (2023). "Health care workers' mental health in the face of COVID-19: a systematic review and meta-analysis." Int J Psychiatry Clin Pract **27**(2): 208-217.

BACKGROUND: Healthcare workers are leading the way in treating patients with coronavirus disease 2019 (COVID-19). Due to the high levels of psychological stress, this group is more likely to experience psychological issues. These psychological problems in healthcare providers include depression, anxiety, insomnia, stress and post-traumatic stress disorder (PTSD). The goal of this systematic review and meta-analysis was to find out how common these problems were in the face of COVID-19. METHODS: On 20 February 2022, systematic searches were conducted in the PubMed, Cochrane Library, Scopus, EMBASE, Science Direct, Web of Science and ProQuest databases. Two authors selected articles based on search keywords. As a last step, articles about the prevalence of psychological problems among healthcare workers in the face of COVID-19 were looked at and analysed for five different outcomes. RESULTS: The initial search yielded 18,609 articles. After reviewing the titles, abstracts and full texts of the articles, 44 were chosen for the final analysis and 29 were subjected to a meta-analysis. Insomnia, anxiety, depression, PTSD and stress are among the

psychological issues faced by healthcare workers. Furthermore, the highest pooled prevalence of depression, anxiety, insomnia, PTSD and stress was 36% (95% confidence interval (CI) 24-50%), 47% (95% CI 22-74%), 49% (95% CI 28-70%), 37% (95% CI 19-59%) and 27% (95% CI 6-69%). **CONCLUSIONS:** In this meta-analysis, insomnia was found to be the most common mental health problem, followed by anxiety, PTSD, depression and stress in healthcare workers in the face of the COVID-19 pandemic. Generally, the pooled prevalence of these mental health problems was higher among physicians, nurses and older staff in the subgroup analysis. As a result, health policymakers and managers of the health care system should think about effective interventions to promote mental health, paying particular attention to these two groups. Key points Studies conducted in China reported more mental problems than in other countries. Health policymakers and health system managers should hold training programs to promote healthcare workers' mental health with a particular focus on more vulnerable groups. The prevalence of PTSD, stress, anxiety, depression and insomnia were higher among physicians, nurses and older staff. Health systems at both national and local levels have to take older physicians, nurses and healthcare providers into consideration while designing interventions.

Kim, I. et Kim, H. R. (2023). "Factors Associated with Job Stress and Their Effects on Mental Health among Nurses in COVID-19 Wards in Four Hospitals in Korea." *BMJ Open* **11**(10).

Increased workload during the COVID-19 pandemic has threatened nurses' mental health. This study aimed to identify factors associated with job stress in COVID-19 nurses compared to other nurses. Nurses were recruited from four hospitals in Republic of Korea in November 2020. The general sociodemographic questionnaire, job stress, anxiety (GAD-7), and depression (PHQ-9) were used to conduct an online survey. Stepwise multiple regression analysis was used to identify the factors associated with job stress. A total of 290 participants were analyzed: 122 in the dedicated ward and 168 in the nondedicated ward nurse groups. Job stress, anxiety, and depression were higher in nurses dedicated to COVID-19 (4.19 ± 0.59 , 5.98 ± 3.92 , and 6.97 ± 4.47 , respectively) than in the nondedicated group (3.92 ± 0.72 ($p = 0.001$), 4.98 ± 4.20 ($p = 0.042$), and 5.92 ± 4.36 ($p = 0.047$), respectively). Among COVID-19 nurses, job stress levels were higher in 30-39 year olds than in 20-29 year olds (3.71 ± 0.43 vs. 4.04 ± 0.54 , $p = 0.006$) and in non-smokers compared with smokers (3.85 ± 0.49 vs. 3.38 ± 0.53 , $p = 0.24$). Anxiety ($\beta = 0.34$, standard error (SE) = 0.01, $p < 0.001$) and clinical experience of 5-10 years ($\beta = 0.23$, SE = 0.10, $p = 0.004$) were associated with job stress. These findings can be applied when devising response strategies for infectious diseases and developing psychological and organizational intervention programs for alleviating job stress in nurses.

Labrague, L. J. (2023). "COVID-19 phobia, loneliness, and dropout intention among nursing students: the mediating role of social support and coping." *Curr Psychol*: 1-9.

The coronavirus outbreak led to many students' experiencing tremendous fear, resulting in numerous psychological and mental health issues, and potentially impacting academic outcomes. The purpose of this study was to examine the mediating role of coping and social support on the relationships between COVID-19 phobia, loneliness, and the intention to abandon nursing education in students. An online survey using a cross-sectional research design was used. A total of 301 full-time student nurses from the Philippines who were currently registered in a nursing programme were included. Nearly half 40.8% ($n = 127$) of the nursing students were found to experience COVID-19 phobia. COVID-19 phobia had direct positive effects on loneliness ($\beta = 0.210$, $p < .001$) and intention to abandon nursing education ($\beta = 0.293$, $p < .001$). Social support and coping had partial mediating effects on the association between COVID-19 phobia and loneliness and the intention to abandon nursing education. COVID-19 phobia was associated with increased loneliness and greater desires to abandon nursing studies in students. However, by providing adequate social support and coping, the negative effects of the pandemic on nursing students' outcome were reduced, resulting in decreased loneliness and improved student retention.

Lee, B. E. C., Ling, M., Boyd, L., et al. (2023). "The prevalence of probable mental health disorders among hospital healthcare workers during COVID-19: A systematic review and meta-analysis." *J Affect Disord* **330**: 329-345.

OBJECTIVES: The mental health impacts of the COVID-19 pandemic continue to be documented worldwide with systematic reviews playing a pivotal role. Here we present updated findings from our systematic review and meta-analysis on the mental health impacts among hospital healthcare workers during COVID-19. **METHODS:** We searched MEDLINE, CINAHL, PsycINFO, Embase and Web Of Science Core Collection between 1st January 2000 to 17th February 2022 for studies using validated methods and reporting on the prevalence of diagnosed or probable mental health disorders in hospital healthcare workers during the COVID-19 pandemic. A meta-analysis of proportions and odds ratio was performed using a random effects model. Heterogeneity was investigated using test of subgroup differences and 95 % prediction intervals. **RESULTS:** The meta-analysis included 401 studies, representing 458,754 participants across 58 countries. Pooled prevalence of depression was 28.5 % (95 % CI: 26.3-30.7), anxiety was 28.7 % (95 % CI: 26.5-31.0), PTSD was 25.5 % (95 % CI: 22.5-28.5), alcohol and substance use disorder was 25.3 % (95 % CI: 13.3-39.6) and insomnia was 24.4 % (95 % CI: 19.4-29.9). Prevalence rates were stratified by physicians, nurses, allied health, support staff and healthcare students, which varied considerably. There were significantly higher odds of probable mental health disorders in women, those working in high-risk units and those providing direct care. **LIMITATIONS:** Majority of studies used self-report measures which reflected probable mental health disorders rather than actual diagnosis. **CONCLUSIONS:** These updated findings have enhanced **OUR** understanding of at-risk groups working in hospitals. Targeted support and research towards these differences in mental health risks are recommended to mitigate any long-term consequences.

Rolland, F. (2023). "[Distress and resilience of Paris-Saclay medical students during the first wave of the COVID-19 pandemic]." *Ann Med Psychol (Paris)* **181**(4): 304-311.

OBJECTIVES: In France, during the first wave of the COVID-19 pandemic, all care workers have been mobilized. Despite this, the strong demand for care has put the health system under great strain. To overcome this overload of work, 86 medical students of Paris-Saclay University came to help some hospital services. They replaced caregivers, nurses or stretcher bearers under "degraded care" conditions. At the university level, the closure of the faculty due to generalized lockdown disrupted the training of these future doctors who were in second, third or fourth year of training (pre-clinical). This exploratory study proposes to collect the impact of the experience of these students during the first wave of the pandemic in order to better understand the difficulties they encountered, as well as the resources they exploited during this period. **MATERIALS AND METHODS:** Using a mixed approach, both quantitative on the one hand and qualitative on the other hand, medical students from Paris-Saclay were interviewed through a retrospective questionnaire distributed in December 2020. The quantitative part of the questionnaire assessed their psychological distress (6-item Kessler scale) and their resilience (Brief Resilience Scale). The qualitative part of the questionnaire included various open questions concerning the motivations to participate, the difficulties encountered, the impact of the situation on their interpersonal relationships or their university course. **RESULTS:** A total of 46 responses from medical students from the University of Paris-Saclay were collected. This constitutes a response rate of 55%. Half of them were second or third year medical students. They were assigned to emergency departments, resuscitation or units dedicated to the care of patients with COVID-19. The average psychological distress score is 7.13. The average resilience score is 3.14. From these results, several categories of students were analyzed according to the elements found in their answers to the open questions. Almost all the students reported wanting to contribute to the collective effort and help hospital services. For some students, it was also a way of making themselves useful while escaping lockdown. The students were exposed to difficult working conditions, the distress of families and the deaths of numerous patients. Their involvement also had an impact on their relationships with their families: they could feel more isolated, or be afraid of infecting them. Their university work was very disrupted by their investment in the hospital: fatigue, concentration problems, lack of motivation could lead them to a form of dropping out of university. **CONCLUSIONS:** The results of this study are part of the context of a particular health crisis. They show medical students exposed to significant psychosocial risks in a period of stress. It seems important to identify what leads some students to develop good resilience capacities. The COVID-19 pandemic acts as an indicator of difficulties that were already present but that it is exacerbating: the link between the faculty, the student and the

hospital, mentoring, supervision, support, university workload, hospital working conditions, psycho-pedagogical support for students and support for most struggling students... These results invite us to rethink the educational engineering of medical studies so that they make it possible, even in a health crisis, to ensure the quality of training and the quality of life of medical students.

Rolland, F., Frajerman, A., Falissard, B., et al. (2023). "Impact of the first wave of the COVID-19 pandemic on French Health students." *L'Encéphale* 49(3): 219-226.

<https://doi.org/10.1016/j.encep.2021.12.004>

Résumé Objectifs Durant la première vague de la pandémie de COVID-19 en France, les professionnels et étudiants en santé ont été intensément mobilisés pour faire face à l'augmentation exponentielle des besoins de soins dans le système de santé. Une étude française dans 21 unités de soins intensifs au cours du premier mois de confinement a révélé que la prévalence des symptômes d'anxiété et de dépression chez les soignants était de 50,4 %, et 30,4 % respectivement. En revanche, peu d'études se sont consacrées à l'évaluation de la détresse psychologique des étudiants en santé durant cette période. Dans la population générale des étudiants français, une étude a révélé que la prévalence des pensées suicidaires, de la détresse grave et du niveau élevé de stress perçu pendant la première vague était de 11,4 %, 22,4 % et 24,7 % respectivement. L'objectif de notre étude est d'évaluer l'impact du COVID-19 sur la santé mentale des étudiants en santé (médecine, soins infirmiers, pharmacie, maïeutique, odontologie, ergothérapie, orthoptie, orthophonie, psychomotricité, audioprothésiste) en France pendant la 1^{re} vague. **Méthodes** Un questionnaire en ligne a été proposé du 11 avril au 30 mai 2020 auprès des étudiants en santé de France. La diffusion a été réalisée par l'intermédiaire de réseaux sociaux et de mails de différents groupes institutionnels (conférences des doyens, présidents d'université, Centre National d'appui à la qualité de vie des étudiants en santé...). Le questionnaire comprenait l'échelle de Kessler en 6 items (K6), la Social Provision Scale SPS-10, la consommation de drogues et de psychotropes et l'évaluation du sommeil. Les tests du Chi2 et test exact de Fisher ont été utilisés pour comparer la prévalence entre les groupes. Par la suite, des modèles de régression logistique ajustés sur l'âge et le sexe ont été utilisés (analyses multivariées). **Résultats** Un total de 4411 étudiants ont répondu : 39 % présentaient une détresse modérée et 21 % une détresse élevée à l'échelle de détresse psychologique de Kessler. Plusieurs facteurs de risque de détresse psychologique ont été retrouvés : être une femme ($p < 0,001$), avoir entre 19 et 21 ans ($p < 0,001$), vivre seul ($p = 0,008$) et ne pas avoir la possibilité de s'isoler chez soi pour travailler ($p < 0,001$). Les étudiants en « première ligne » face aux patients expriment moins de détresse que les étudiants qui sont confinés sans activité clinique (57 % contre 62 %, $p = 0,003$), une meilleure qualité du sommeil (34 % contre 28 %, $p < 0,001$) mais une augmentation de la consommation de médicaments (8,5 % contre 6,5 %, $p = 0,044$) ou d'autres substances psychoactives (18 % contre 10 %, $p < 0,001$). Les étudiants en soins infirmiers et étudiants en médecine présentent une détresse psychologique et une augmentation de la consommation de produits plus importantes que les autres étudiants (15 % contre 9,2 %). **Conclusions** La pandémie COVID-19 a eu un impact certain sur la santé mentale des étudiants en santé et leur formation, bien que des disparités existent selon les cursus, et selon la participation aux soins des étudiants. Cette étude présente certaines limites : le taux de réponse était faible; les jeunes étudiants (18–21 ans) étaient surreprésentés. Il s'agit de la première étude nationale sur la santé mentale des étudiants en santé et elle pourra servir de référence pour comparer avec les futures études. Il semble urgent d'intervenir pour améliorer le bien-être des étudiants en santé d'autant plus que la crise sanitaire tend à se prolonger.

Stodolska, A., Wójcik, G., Barańska, I., et al. (2023). "Prevalence of burnout among healthcare professionals during the COVID-19 pandemic and associated factors - a scoping review." *Int J Occup Med Environ Health* 36(1): 21-58.

The outbreak of the COVID-19 pandemic exerted significant mental burden on healthcare workers (HCWs) operating in the frontline of the COVID-19 care as they experienced high levels of stress and burnout. The aim of this scoping review was to identify prevalence and factors associated with burnout among HCWs during the first year of the COVID-19 pandemic. A literature search was performed in PubMed, Web of Science, and CINAHL. Studies were selected based on the following

inclusion criteria: cross-sectional, longitudinal, case-control, or qualitative analyses, published in peer-reviewed journals, between January 1, 2020 and February 28, 2021. Studies carried out on other occupations than healthcare workers or related to other pandemics than COVID-19 were excluded. Following the abstract screen, from 141 original papers identified, 69 articles were eventually selected. A large variation in the reported burnout prevalence among HCWs (4.3-90.4%) was observed. The main factors associated with increase/ decrease of burnout included: demographic characteristics (age, gender, education level, financial situation, family status, occupation), psychological condition (psychiatric diseases, stress, anxiety, depression, coping style), social factors (stigmatisation, family life), work organization (workload, working conditions, availability of staff and materials, support at work), and factors related with COVID-19 (fear of COVID-19, traumatic events, contact with patients with COVID-19, having been infected with COVID-19, infection of a colleague or a relative with COVID-19, higher number of deaths observed by nurses during the COVID-19 pandemic). The findings should be useful for policy makers and healthcare managers in developing programs preventing burnout during the current and future pandemics. *Int J Occup Med Environ Health*. 2023;36(1):21-58.

Caillet, A., Fillon, M., Plou, M., et al. (2022). "Burnout Syndrome During COVID-19 Second Wave on ICU Caregivers." *J Crit Care Med (Targu Mures)* 8(4): 266-272.

OBJECTIVE: The main objective of this article is to evaluate the prevalence of burnout syndrome (BOS) among the Intensive Care Unit (ICU) healthcare workers. **METHODS:** The COVID-impact study is a study conducted in 6 French intensive care units. Five units admitting COVID patient and one that doesn't admit COVID patients. The survey was conducted between October 20th and November 20th, 2020, during the second wave in France. A total of 208 professionals responded (90% response rate). The Maslach Burnout Inventory scale, the Hospital Anxiety and Depression Scale and the Impact of Event Revisited Scale were used to study the psychological impact of the COVID-19 Every intensive care unit worker. **RESULTS:** The cohort includes 208 professionals, 52.4% are caregivers. Almost 20% of the respondents suffered from severe BOS. The professionals who are particularly affected by BOS are women, engaged people, nurses or reinforcement, not coming willingly to the intensive care unit and professionals with psychological disorders since COVID-19, those who are afraid of being infected, and people with anxiety, depression or post-traumatic stress disorder. Independent risk factors isolated were being engaged and being a reinforcement. Being a volunteer to come to work in ICU is protective. 19.7% of the team suffered from severe BOS during the COVID-19 pandemic in our ICU. The independent risk factors for BOS are: being engaged (OR = 3.61 (95% CI, 1.44; 9.09), don't working in ICU when it's not COVID-19 pandemic (reinforcement) (OR = 37.71 (95% CI, 3.13; 454.35), being a volunteer (OR = 0.10 (95% CI, 0.02; 0.46). **CONCLUSION:** Our study demonstrates the value of assessing burnout in health care teams. Prevention could be achieved by training personnel to form a health reserve in the event of a pandemic.

Cousin, L., Di Beo, V. et Marcellin, F. (2022). "Use of psychoactive substances by night-shift hospital healthcare workers during the first wave of the COVID-19 pandemic: a cross-sectional study based in Parisian public hospitals (ALADDIN)." *BMJ Open* 12(3): e055699.

OBJECTIVES: This study aimed to estimate the prevalence of psychoactive substance (PAS) use in night-shift healthcare workers (NSHW) during France's first COVID-19 wave (March-May 2020). **DESIGN:** Observational cross-sectional online survey. **SETTING:** 39 public hospitals in the Assistance Publique des Hôpitaux de Paris (AP-HP) network in the Parisian area. **PARTICIPANTS:** A total of 1238 nurses, assistant nurses, X-ray technicians, managers, lab technicians, midwives and childcare assistants working at night or alternating between days and nights answered the questionnaire. **INTERVENTION:** Online survey. **OUTCOME MEASURES:** PAS use prevalence after weighting data for sex, age and profession using calibration on margins, in order to be representative of all AP-HP NSHW. We used the Fagerström scale and the Alcohol Use Disorders Identification Test Concise to assess PAS use. **RESULTS:** The weighted estimated prevalences of daily smoking, alcohol drinking and tranquilliser use in participating NSHW were 21.4, 1.3 and 2.4%, respectively. Twelve per cent (11.7%) of our study sample used opioids. During the first COVID-19 wave, PAS use remained stable except for tobacco use,

with 8.6% of participants reporting an increase. Previous 3-month prevalences of tranquilliser and opioid use were significantly higher than in the general population. CONCLUSION: Daily smoking (especially in younger men) and tranquilliser and opioid use were highly prevalent in NSW in the AP-HP network during France's first COVID-19 wave. Specific interventions for quitting smoking and addressing determinants of tranquilliser and opioid use in NSW need to be developed and evaluated to improve quality of life in these essential, underdiagnosed and undertreated health personnel.

Crowe, S., Fuchsia Howard, A. et Vanderspank, B. (2022). "The mental health impact of the COVID-19 pandemic on Canadian critical care nurses." *Intensive Crit Care Nurs* **71**: 103241.

OBJECTIVE: Focusing on Canadian critical care nurses (CCNs), the study objectives were to examine the impact of the COVID-19 pandemic on: mental health, quality of work life, and intent to stay in their current positions. RESEARCH DESIGN: Mixed-methods study using an online cross-sectional survey and integration of closed- and open-ended survey data. SETTING: Canadian CCNs working in an intensive care unit, high acuity unit, or intensive care step-down unit during the COVID-19 pandemic between May 2021 to June 2021. MAIN OUTCOME MEASURES: The survey consisted of four instruments: (1) the impact of event scale - revised, (2) the depression, anxiety, and stress scale, (3) the professional quality of life scale, and (4) intent to turnover tool, as well as one optional open-ended question. RESULTS: From across Canada, 425 CCNs responded. The large majority reported symptoms of post traumatic stress disorder (74%), depression (70%), anxiety (57%), and stress (61%). All (100%) reported moderate to high burnout, 87% were suffering from signs of secondary traumatic stress, and 22% intended to quit their current employment. Qualitative analysis of written comments submitted by 147 (34.5%) of the respondents depicted an immense mental health toll on CCNs that stemmed from 1) failed leadership and 2) the traumatic nature of the work environment, that led to 3) a sense of disillusionment, defeat, and an intent to leave. CONCLUSION: The mental health toll of the pandemic has been significant for Canadian CCNs and highlights the urgent need for individual supports and systems level changes.

Damico, V., Demoro, G., Bolgi, S., et al. (2022). "Impact of COVID-19 outbreak on ICU nurses' mental health. An Italian multicenter study." *J Nurs Manag* **75**(1): 51-58.

AIM: AIM: The aim of this study was to evaluate variations in ICU nurses' mental health status over the COVID-19 outbreak by quantifying the extent of symptoms of depression, anxiety and PTSD over time. METHODS: METHODS: This study was an Italian multicenter prospective cohort study assessing caseness of anxiety, depression and PTSD at 6 and 12 months from the beginning of the COVID-19 outbreak in Italy. RESULTS: RESULTS: A total of 359 nurses, 233 (64.9%) were males and 126 (35.1%) were females were enrolled. At 6 months the caseness prevalence for anxiety, depression and PTSD were 31.3%, 32.1% and 18.7% respectively. At 12 months the caseness prevalence for anxiety, depression and PTSD were 34.8%, 36.4% and 24.1 % respectively. No statistically significant increase between 6 and 12 months was recorded for the caseness prevalence anxiety ($p = .29$) and depression ($p = .19$). However, an increase for the caseness prevalence PTSD at 12 months was observed ($p = .049$). The significant risk factors for the 221 patients with at least one disorders were age 31-40 ($RR = 1.44$, $IC = 1.25-1.89$; $p < .001$), female gender ($RR = 1.31$, $IC = 1.02-1.51$; $p = .042$) and had 0-5 years of professional experience ($RR = 1.36$, $IC = 1.02-1.63$; $p = .031$). CONCLUSION: The results of our study may provide support for the implementation of some interventions for well-being in COVID-19 outbreak condition.

Druart, M.-C. et Blanchard, P.-Y. (2022). "Ressources personnelles utilisées par les infirmiers inscrits dans un cursus en pratique avancée lors de la pandémie de coronavirus en France : une recherche mixte séquentielle." *Recherche en soins infirmiers* **148**(1): 89-106.

<https://www.cairn.info/revue-recherche-en-soins-infirmiers-2022-1-page-89.htm>

Introduction : début 2020, l'état d'urgence sanitaire est déclaré en France suite à l'émergence d'une pandémie au SARS-CoV-2. Contexte : les infirmiers inscrits dans un parcours de pratique avancée ont mobilisé leurs compétences pendant cette crise en s'appuyant sur les ressources disponibles.

Objectifs : analyser les ressources personnelles utilisées par ces infirmiers dans le processus de mobilisation des compétences, lors de la crise sanitaire. Méthode : recherche mixte séquentielle quantitative puis qualitative auprès des infirmiers français inscrits dans un cursus de pratique avancée. Résultats : il émerge deux groupes d'activité pour ces infirmiers : en première ligne en service Covid, et la coordination. Il semble y avoir plus d'opportunités d'utiliser les compétences spécifiques à la pratique avancée en coordination. Discussion : les stratégies d'ajustement au stress (coping et hardiesse) favorisent l'engagement des infirmiers dans leur pratique professionnelle. Les savoirs disciplinaires participent à l'enrichissement des connaissances nécessaires à la mobilisation des compétences. Conclusion : de futures recherches devraient explorer les ressources et la mobilisation des compétences dans l'implantation des infirmiers en pratique avancée.

Fournier, A., Laurent, A. et Lheureux, F. (2022). "Impact of the COVID-19 pandemic on the mental health of professionals in 77 hospitals in France." *PLoS One* **17**(2): e0263666.

The COVID-19 pandemic has led to significant re-organisation of healthcare delivery in hospitals, with repercussions on all professionals working in healthcare. We aimed to assess the impact of the pandemic on the mental health of professionals working in health care institutions and to identify individual and environmental factors influencing the risk of mental health disorders. From 4 June to 22 September 2020, a total of 4370 professionals responded to an online questionnaire evaluating psychological distress, severity of post-traumatic stress symptoms, stress factors, and coping strategies. About 57% of the professionals suffered from psychological distress, and 21% showed symptoms of potential post-traumatic stress. Professionals working in radiology, those working in quality/hygiene/security and nurses' aides were the most affected groups. The media focus on the crisis, and a high workload were the most prevalent stress factors, followed by uncertainty regarding the possibility of containing the epidemic, the constantly changing hygiene recommendations/protocols, and the lack of personal protective equipment. The use of coping strategies, notably positive thinking, helped to mitigate the relation between perceived stress and mental health disorders. The COVID-19 pandemic has had far-reaching negative repercussions for all professionals, with some sectors more markedly affected. To prevent mental health disorders in professionals during a public health crisis, support services and management strategies within hospitals should take account of the importance of positive thinking and social support.

Halcomb, E. (2022). "Mental health, safety and support during COVID-19: A cross-sectional study of primary health care nurses." *Pain Res Manag* **30**(2): 393-402.

AIM: The aim of this study is to explore primary health care nurses' mental health, concerns and perceived safety and supports during COVID-19. BACKGROUND: Respiratory pandemics have negative impacts on nurses' wellbeing. While literature is replete with hospital nurses' experiences, there is less exploration of COVID-19 impacts on primary health care nurses. Given the importance of primary health care nurses in the health system, understanding their experiences is vital. METHODS: Three hundred and fifty nine primary health care nurses responded to an online cross-sectional survey. The Depression Anxiety Stress Scales (DASS-21) was used to measure emotional state. Data were analysed using descriptive and inferential statistics. RESULTS: DASS-21 scores indicated that 39.6% of participants were experiencing symptoms of depression, anxiety or stress. Of those, 41.8% were experiencing symptoms on one scale, 26.9% were experiencing symptoms on two scales and 31.2% were experiencing symptoms across all three scales. Most participants identified that their feelings were related to COVID-19. CONCLUSIONS: COVID-19 is having a significant impact on primary health care nurses' mental health. Nurse managers need to develop strategies to effectively address nurses' concerns and effectively support them to sustain the workforce during and after the pandemic. IMPLICATIONS FOR NURSING MANAGEMENT: Findings from this study can inform the design of effective nurse support programmes to reduce mental health impacts and promote staff wellbeing during the pandemic.

Han, J., Zhang, L., Liu, Y., et al. (2022). "Effect of a group-based acceptance and commitment therapy programme on the mental health of clinical nurses during the COVID-19 sporadic outbreak period." *J Nurs Manag* **30**(7): 3005-3012.

AIM: To develop and implement of a group-based acceptance and commitment therapy programme in helping clinical nurses with mental health problems during the sporadic COVID-19 outbreak period. **BACKGROUND:** In the face of the continuing COVID-19 pandemic, clinical nurses have a high risk of mental health issues. **METHODS:** A quasi-experimental design was used. Two hundred twenty-six nurses were recruited from four general hospitals to receive 10 sessions of acceptance and commitment therapy programme. The Symptom Checklist-90, Perceived Stress Scale and Connor-Davidson Resilience Scale were used to assess nurses' mental health symptom, perceived stress and psychological resilience at pre-intervention and 4-week post-intervention. **RESULTS:** The mean attendance sessions was 5.78. The Symptom Checklist-90 score was significantly lower at post-intervention than pre-intervention ($P < 0.01$), and there were no significant changes of perceived stress and psychological resilience. There were significant correlations among the changed rates of mental health, perceived stress and psychological resilience ($P < 0.01$). **CONCLUSION:** The acceptance and commitment therapy programme was effective in relieving mental health symptoms for clinical nurses and could protect clinical nurses' perceived stress and psychological resilience. However, a randomized controlled trial is needed to confirm the findings. **IMPLICATION FOR NURSING MANAGEMENT:** To facilitate clinical nurses' psychological health in crisis situation, nursing management team should provide and allocated appropriate resources to support the healthcare providers.

Hur, G., Cinar, N. et Suzan, O. K. (2022). "Impact of COVID-19 pandemic on nurses' burnout and related factors: A rapid systematic review." *Arch Psychiatr Nurs* **41**: 248-263.

AIM: This study aimed to investigate the effect of COVID-19 pandemic on nurses' burnout and related factors. **BACKGROUND:** Nurses at the frontlines in every field of the health system and composed most of the health service industry closely experience all negative events during the pandemic. **METHODS:** This study is a rapid systematic review. **RESULTS:** A total of 751 studies were selected, of which 13 studies were compatible with the inclusion criteria. The sample size ranged from 107 to 12.596. The studies determined that nurses' burnout levels were generally moderate level and above during the COVID-19 pandemic. Sociodemographic, occupational, psychological, and COVID-19-related factors affected this burnout. **CONCLUSION:** The results of this review may use to make implications that would ease the effect of the pandemic on nurses and develop strategies to protect nurses from burnout in similar possible situations. The protocol information is included here for blind peer review. **PROSPERO REGISTRATION NUMBER (ID):** CRD42021244849. **REGISTRATION AND PROTOCOL:** Prior to undertaking the review, we registered the protocol in the International Prospective Register of Systematic Reviews (PROSPERO). The registration number is CRD42021244849. Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42021244849. The changes made during the review process were registered in PROSPERO with an update.

Jose, S., Cyriac, M. C., Dhandapani, M., et al. (2022). "Mental Health Outcomes of Perceived Stress, Anxiety, Fear and Insomnia, and the Resilience among Frontline Nurses Caring for Critical COVID-19 Patients in Intensive Care Units." *BMC Psychiatry* **26**(2): 174-178.

BACKGROUND: The coronavirus disease-2019 (COVID-19) pandemic has led to a significant disruption in healthcare delivery and poses a unique long-term stressor among frontline nurses. Hence, the investigators planned to explore the adverse mental health outcomes and the resilience of frontline nurses caring for COVID-19 patients admitted in intensive care units (ICUs). **MATERIALS AND METHODS:** A cross-sectional online survey using Google form consisted of questionnaires on perceived stress scale (PSS-10), generalized anxiety disorder scale (GAD-7), Fear Scale for Healthcare Professionals regarding the COVID-19 pandemic, insomnia severity index, and the Connor-Davidson Resilience Scale-10 (CD-RISC) were administered among the nurses working in COVID ICUs of a tertiary care center in North India. **RESULTS:** A considerable number of subjects in the study reported

symptoms of distress (68.5%), anxiety (54.7%), fear (44%), and insomnia (31%). Resilience among the frontline nurses demonstrated a moderate to a high level with a mean percentage score of 77.5 (31.23 \pm 4.68). A negative correlation was found between resilience and adverse mental outcomes; hence, resilience is a reliable tool to mitigate the adverse psychological consequences of the COVID-19 pandemic. CONCLUSION: Emphasizing the well-being of the nurses caring for critical COVID-19 patients during the pandemic is necessary to enable them to provide high-quality nursing care. HOW TO CITE THIS ARTICLE: Jose S, Cyriac MC, Dhandapani M, Mehra A, Sharma N. Mental Health Outcomes of Perceived Stress, Anxiety, Fear and Insomnia, and the Resilience among Frontline Nurses Caring for Critical COVID-19 Patients in Intensive Care Units. *Indian J Crit Care Med* 2022;26(2):174-178.

Jubin, J., Delmas, P. et Gilles, I. (2022). "Protective Factors and Coping Styles Associated with Quality of Life during the COVID-19 Pandemic: A Comparison of Hospital or Care Institution and Private Practice Nurses." *International Journal of Environmental Research and Public Health* **19**(12).

In France, nurses work either in hospitals and care institutions or in private practice, following physicians' prescriptions and taking care of patients at their homes. During the COVID-19 pandemic, these populations of nurses were exposed to numerous sources of stress. The main objective of the present study was to identify the protective factors they mobilized to face the crisis and how these factors contributed to sustaining their quality of life (QoL). A cross-sectional study was conducted to answer these questions. Overall, 9898 French nurses participated in the study, providing demographic information and filling out QoL (WHOQOL-BREF), perceived stress (PSS-14), resilience (CD-RISC), social support (MSPSS), and coping style (BRIEF-COPE) questionnaires. The results revealed very few differences between the two groups of nurses, which is surprising given the drastically different contexts in which they practice. Social support and two coping strategies (positive reframing and acceptance) were associated with a high QoL, whereas perceived stress and four coping strategies (denial, blaming self, substance use, and behavioral disengagement) were associated with poor QoL. In the light of these results, we recommended promoting social support and coping strategies to help nurses cope during the pandemic.

Kim, S. C., Rankin, L. et Ferguson, J. (2022). "Nurses' mental health from early COVID-19 pandemic to vaccination." *J Nurs Scholarsh* **54**(4): 485-492.

AIMS: The influence of the COVID-19 vaccine and the evolution of the pandemic over time on nurses' mental health have not been thoroughly examined. This study aimed to explore the changes in nurses' mental health from the early pandemic to the early vaccination period over a 1-year time span and examine vaccination and coping mechanisms as predictors of nurses' poor mental health and burnout. METHODS: Three cross-sectional surveys were conducted: Early-pandemic (n = 320), pre-vaccination (n = 228), and early-vaccination cohorts (n = 292). FINDINGS: About 72% of nurses in the early-vaccination cohort were fully vaccinated with two doses of mRNA COVID-19 vaccines. There were significant decreases in moderate/severe anxiety and moderate/severe depression for the early-vaccination cohort compared to the other cohorts. In multivariate analyses, vaccination had almost three-fold higher odds of moderate/severe anxiety (Odds Ratio [OR] = 2.87; 95% Confidence Interval [CI] = 1.28-6.44). High resilience, family functioning, and spirituality were associated with two- to five-fold lower odds of poor mental health and burnout. CONCLUSIONS: Although nurses in the early-vaccination cohort had lower anxiety and depression than earlier cohorts, COVID-19 vaccination had minimal associations with nurses' mental health. Coping mechanisms and organizational support appear to be important predictors of nurses' poor mental health and burnout. CLINICAL RELEVANCE: The evidence gathered over 1 year of the pandemic may be helpful for a better understanding of the challenges facing frontline nurses and preparing for future healthcare crises. As a part of the preparedness plan for the future, evidence-based interventions that raise frontline nurses' resilience, as well as family and spiritual support, should be considered.

La Rosa, G. et Maggio, M. G. (2022). "Mental Health of Nurses Working in a Judicial Psychiatry Hospital during the COVID-19 Pandemic in Italy: An Online Survey." *Healthcare (Basel)* **10**(4): :61.

The onset of this new pandemic has highlighted the numerous critical issues at the organizational level, which involve both national healthcare and the judicial system. For this reason, nurses working in prisons may exhibit a poor quality of life, mainly related to their high level of work stress. This cross-sectional survey aimed to assess the emotional state of nurses working in the Judicial Psychiatry Hospital of Barcellona PG (Messina, Italy) during the COVID-19 pandemic. Data collection occurred twice: from 1 April to 20 May 2020 (i.e., during the Italian lockdown) and from 15 October to 31 December 2021 (during the second wave). At baseline, the 35 enrolled nurses presented medium to high levels of stress. At T1, they had a reduction in perceived personal achievement (MBI-PR $p = 0.01$), an increase in emotional exhaustion (MBI-EE $p < 0.001$), and stress (PSS $p = 0.03$), as well as anxiety (STAI Y1/Y2 $p < 0.001$). Most participants underlined the high usability of the online system (SUS: 69.50/SD 19.9). We also found increased stress, anxiety, and burnout risk in nursing staff. The study clearly demonstrates that the first year of the COVID-19 pandemic in Italy caused a worsening of mental health among nurses working in prisons. We believe that monitoring the mental state of healthcare professionals is fundamental to improving their quality of life and healthcare services.

Labrague, L. J. (2022). "Specific coping styles and its relationship with psychological distress, anxiety, mental health, and psychological well-being among student nurses during the second wave of the COVID-19 pandemic." *Perspect Psychiatr Care* **58**(4): 2707-2714.

PURPOSE: To identify specific coping skills that contribute to relieving anxiety and stress while supporting student nurses' mental health and psychological well-being. DESIGN AND METHOD: This is a cross-sectional online survey involving 261 students nurses from private and government-owned nursing schools in the Central Philippines. RESULTS: Resilience was associated with reduced stress and anxiety and better mental health and psychological well-being. Mental disengagement was associated with lower anxiety and stress levels. Spiritual and not scientific sources of support were associated with lower stress and increased psychological well-being and mental health. PRACTICE IMPLICATIONS: Nurse faculty should foster functional coping skills in student nurses to enhance their ability to endure negative psychological and mental health outcomes related to the pandemic.

Lake, E. T., Narva, A. M., Holland, S., et al. (2022). "Hospital nurses' moral distress and mental health during COVID-19." *J Adv Nurs* **78**(3): 799-809.

AIMS: To explore factors associated with nurses' moral distress during the first COVID-19 surge and their longer-term mental health. DESIGN: Cross-sectional, correlational survey study. METHODS: Registered nurses were surveyed in September 2020 about their experiences during the first peak month of COVID-19 using the new, validated, COVID-19 Moral Distress Scale for Nurses. Nurses' mental health was measured by recently experienced symptoms. Analyses included descriptive statistics and regression analysis. Outcome variables were moral distress and mental health. Explanatory variables were frequency of COVID-19 patients, leadership communication and personal protective equipment/cleaning supplies access. The sample comprised 307 nurses (43% response rate) from two academic medical centres. RESULTS: Many respondents had difficulty accessing personal protective equipment. Most nurses reported that hospital leadership communication was transparent, effective and timely. The most distressing situations were the transmission risk to nurses' family members, caring for patients without family members present, and caring for patients dying without family or clergy present. These occurred occasionally with moderate distress. Nurses reported 2.5 days each in the past week of feeling anxiety, withdrawn and having difficulty sleeping. Moral distress decreased with effective communication and access to personal protective equipment. Moral distress was associated with longer-term mental health. CONCLUSION: Pandemic patient care situations are the greatest sources of nurses' moral distress. Effective leadership communication, fewer COVID-19 patients, and access to protective equipment decrease moral distress, which influences longer-term mental health. IMPACT: Little was known about the impact of COVID-19 on nurses' moral distress. We found that nurses' moral distress was associated with the volume of care for infected patients, access to personal protective equipment, and communication from leaders. We found that moral distress was associated with longer-term mental health. Leaders should communicate transparently to

decrease nurses' moral distress and the negative effects of global crises on nurses' longer-term mental health.

Lima, A., Moreira, M. T., Fernandes, C., et al. (2022). "The Burnout of Nurses in Intensive Care Units and the Impact of the Pandemic of SARS-CoV-2: Protocol of a Scoping Review." *Nurs Rep* **12**(3): 655-660.

Background: The SARS-CoV-2 pandemic has brought multiple challenges for health institutions and their professionals. The requirement of this disease forced nurses to confront organizational and clinical challenges to maintain the quality standards of care they provide. These requirements may have contributed to increased burnout symptoms. This study aims to map the scientific evidence related to nurses' burnout in intensive care units. Methods: A scoping review will be conducted according to the Joanna Briggs Institute methodology. Relevant databases will be used as well as grey literature, where the following words will be used: burnout, nurses, intensive care units and SARS-CoV-2. Results: This scoping review will include all types of studies-quantitative, qualitative and mixed- and all types of reviews that focus on the objective of this review. Conclusions: It is vital to determine the impact of the burnout caused by the pandemic of SARS-CoV-2 to assess amending measures of risk and protection factors. This will help in the implementation of guidelines according to the available evidence. Additionally, this will help to improve the skills of these professionals as well as to reduce their emotional and physical exhaustion. This protocol is registered with the Open Science Framework.

MacPhee, M., Li, T. M., Pien, L. C., et al. (2022). "Effects of work conditions and organisational strategies on nurses' mental health during the COVID-19 pandemic." *Healthcare (Basel)* **30**(1): 71-78.

AIMS: This study aims to examine coronavirus disease 2019 (COVID-19) pandemic-related work factors for adverse effects on the mental health and whether organisational strategies attenuate these effects. BACKGROUND: COVID-19 pandemic has led to increased work burden and mental health risks for nurses. METHODS: A total of 1499 Taiwanese full-time nurses completed a web-based questionnaire between July and December 2020. Pandemic-related work conditions, namely, increased working hours, caring for COVID-19 patients, occupational stigma and redeployment, were assessed. Organisational strategies to combat pandemic-related work stressors including compensation to workers and adequate protection equipment were surveyed. Outcome measures were intention to leave, burnout and depression assessed using validated questionnaires. RESULTS: Redeployment, increased working hours and occupational stigma were associated with adverse mental health and intention to leave in logistic regression analysis. Caring for COVID-19 patients was negatively associated with depression. Adequate compensation for workers modified the association between redeployment and burnout. CONCLUSIONS: Pandemic-related work conditions were associated with adverse mental health and intention to leave. Organisational strategies attenuated the adverse impact of the pandemic. IMPLICATIONS FOR NURSING MANAGEMENT: Efforts to decrease stigma and organisational strategies including compensation for workers and adequate protection equipment provision should be adopted to improve nurses' health during a pandemic.

Maideen, A. A. et Idris, D. R. (2022). "Nurses' mental health and coping strategies throughout COVID-19 outbreak: A nationwide qualitative study." *Int J Ment Health Nurs* **31**(5): 1213-1227.

This qualitative exploratory study explored nurses' mental health and coping strategies working with suspected and confirmed COVID-19 patients in Brunei Darussalam. Eleven focus group discussions were conducted between October 2020 and January 2021, involving 75 participants. Three themes emerged: 'COVID-19 roller-coaster transitional journey' explained the different psychological responses of the journey of the nurses from merely hearing about COVID-19 from far to the invasion of the virus and community outbreak in the country; 'Mind my mind and heart' share experiences of the nurses in terms of their mental health and emotional responses; and 'the psychosocial system' described the coping mechanisms of the nurses throughout the COVID-19 pandemic. Nurses' mental health and coping strategies during the COVID-19 pandemic influenced how they provided care and performed other tasks, which should not be taken for granted. Nurses employed psychosocial coping methods at the different phases of the COVID-19 pandemic and support from family, friends, the

public, and the governmental level. This research is fundamental as a basis for other countries to design psychological interventions during this yet unsettled COVID-19 pandemic.

Martin-Rodriguez, L. S. et Escalda-Hernandez, P. (2022). "Mental health of Spanish nurses working during the COVID-19 pandemic: A cross-sectional study." *Int Nurs Rev* **69**(4): 538-545.

AIM: To explore the impact of the COVID-19 pandemic on the mental health of nurses working in primary, secondary, and tertiary healthcare centers in Navarre (Spain). BACKGROUND: Healthcare workers, especially nurses, are at high risk for developing mental health problems during the COVID-19 pandemic. INTRODUCTION: Spain ranks among the European countries with the highest incidence of and mortality from COVID-19 and has a 31% deficit in the number of nurses compared with the average for the European Union. METHODS: This was a cross-sectional study involving 800 Registered Nurses in Navarre, Spain. Four standardized instruments, along with a self-administered online questionnaire, were used to measure the impact in terms of depression, anxiety, insomnia, and posttraumatic stress disorder. The STROBE checklist for cross-sectional studies was used to report this study. RESULTS: Of the 800 nurses, 68% had some level of depression, anxiety, insomnia, and distress, and of these, 38% had moderate or severe symptoms. Those who worked in hospital COVID units and in nursing homes showed a higher impact on their mental health. DISCUSSION: The sustained pressure that nurses have experienced in their work during the COVID-19 pandemic has negatively affected their mental health. CONCLUSION: This study found that nurses who worked in hospital COVID units and in nursing homes during the pandemic had worse mental health outcomes. IMPLICATIONS FOR NURSING/POLICY: Recommendations for nursing policy include the need to implement coaching and emotional programs to support nurses on the frontlines of the pandemic. There is also an urgent need for the implementation of national training programs to strengthen health emergency preparedness, improve response capacity, and increase the resilience of nurses to disasters.

Mirzaei Dahka, S., Maroufizadeh, S., Pouralizadeh, M., et al. (2022). "Mental Health and Resilience among Nurses in the COVID-19 Pandemic: A Web-Based Cross-Sectional Study." *Iran J Psychiatry* **17**(1): 35-43.

Objective: Nurses exposed to COVID-19 could be psychologically stressed. The present study investigated the mental health and the resilience level in the nurses' population. Method: This cross-sectional study was performed on 432 nurses in 27 hospitals working in Guilan province, north of Iran, between April 29, to May 14, 2020. Mental health and resilience were measured using the 12-item General Health Questionnaire-12 (GHQ-12) and the 10-item Connor-Davidson Resilience Scale (CD-RISC-10). Hierarchical multiple linear regression model was used to identify factors associated with mental health. Results: The mean GHQ-12 and CD-RISC-10 scores were 15.72 (SD, 5.67) and 25.97 (SD, 6.88), respectively. Probable psychological distress (GHQ-12 score ≥ 15) was present in 57.2% of nurses. Among demographic and COVID-19-related variables, only educational level was significantly and negatively correlated with mental health. After controlling the variables, hierarchical regression analyses results showed that lower resilience was associated with poor mental health ($\beta = -0.49$; $P < 0.001$). Conclusion: Regarding the nurses' mental health, appropriate psychological/psychiatric intervention is necessary, and resilience can play a role as a mental health promoter.

Napoli, G. (2022). "Stress and depressive symptoms among Italian mental health nurses during the COVID-19 pandemic, a cross-sectional study." *Arch Psychiatr Nurs* **36**: 41-47.

This study used the cross-sectional web survey methodology to assess how the COVID-19 pandemic affected Italian psychiatric nurses in terms of stress levels and depressive symptoms. A total of 266 nurses belonging to the Italian Mental Health Departments were interviewed and they were subjected to two validated scales respectively PSS-10 (for the evaluation of stress) and PHQ-9 (for the evaluation of depressive symptoms). Statistical analysis showed moderate stress levels and a prevalence of sub-threshold (borderline) depressive symptoms among responding nurses. Logistic regression analysis reported that frontline nurses on COVID-19 positive patients are at greater risk of reporting higher levels of stress and major depressive symptoms, as are female nurses and juvenile nurses. age. Monitoring and managing the psychological well-being of nursing staff are to be considered among

the priorities of mental health service managers and are part of a process that aims to increase individual and organizational well-being but above all to improve the outcomes resulting from assistance.

Nohra, R. G., Loizeau, V., Lartigue-Malgouyres, C., et al. (2022). "COVID-19 pandemic's impact on French Health Students: A cross-sectional study during the third wave." *Int J Environ Res Public Health* **311**: 165-172.

BACKGROUND: COVID19 pandemic had a huge impact on global mental health. Health students, because of their age and status, are a more at-risk population. National survey during the first wave already found high levels of psychological distress. OBJECTIVE: This nationwide study aimed to assess health's student mental health during the third wave in France. METHODS: We did an online national cross-sectional study, which addressed all health students from April 4th to May 11th 2021. The questionnaire included sociodemographic and work conditions questions, Kessler 6 scale, and numeric scales. RESULTS: 16,937 students answered, including 54% nurse and 16% medical students. Regarding K6 scale, 14% have moderate (8-12) and 83% high (≥ 13) level of psychological distress. In multivariate analysis, being a man (OR = 0.54, 95% CI [0.48; 0.60], $p < 0.001$) and not living alone (OR = 0.71, 95% CI [0.62; 0.82], $p < 0.001$), are associated with a reduced risk of psychological distress. Not having the ability to isolate themselves (OR = 1.58, 95% CI [1.39; 1.81], $p < 0.001$), and having low (OR = 2.31, 95% CI [2.08; 2.56], $p < 0.001$) or important (OR = 4.58, 95% CI [3.98; 5.29], $p < 0.001$) financial difficulties are associated with an increased risk of psychological distress. LIMITATIONS: The response rate was low regarding the target population (300,000 health students). CONCLUSION: Compared to the first national survey, we noticed mental health deterioration. Psychological distress (83% high level versus 21%), substance use (21% versus 13%), and psychotropic treatment use (18% versus 7.3%) hugely increased. These results highlighted the need to increase support actions for health students.

Pierrette, M. et Cuny, A. (2022). "Impacts de la pandémie de Covid-19 sur les conditions de travail et la santé du personnel soignant des EHPAD privés en France." *Références En Santé é Au Travail*(170): 53-62.

Quelles conséquences la pandémie de Covid-19 a-t-elle eu sur le travail et la santé du personnel soignant dans les établissements d'hébergement pour personnes âgées dépendantes (Ehpad) privés en France ? Un secteur pourtant déjà fragile qui doit faire face à une sinistralité importante en constante augmentation. Un questionnaire a été diffusé entre octobre et décembre 2020 aux aides-soignants, infirmiers et infirmiers coordinateurs d'Ehpad privés français. Les résultats permettent également d'identifier certains facteurs particulièrement prédictifs de la santé selon le métier et d'alimenter les réflexions des professionnels du secteur sur les aménagements à proposer en lien avec une situation pandémique et des conditions de travail transitoires et/ou pérennes en découlant.

Rahman, A. (2022). "A scoping review of COVID-19-related stress coping resources among nurses." *Int J Nurs Sci* **9**(2): 259-267.

OBJECTIVE: The entire mental health hazard among the nurses dealing with COVID-19 is just the tip of the iceberg. The goal of this study was to find acceptable and adaptive coping techniques for nurses in order to keep the healthcare system resilient during and after the COVID-19 pandemic. METHOD: The scoping review search took place from January 2020 to May 2021 published articles, and the results were saved in Endnote software. For data synthesis and review, the Joanna Briggs Institute manual and PRISMA-ScR principles were followed. Following backward and forward screening to exclude redundant, irrelevant, and ineligible studies, 13 studies (3,613 nurses) were finally selected for this review. RESULTS: The majorities of participants in these studies were female and had children, and worked in departments of critical care, emergency, and fever clinics. Safety concerns for family or colleagues, as well as a lack of safe working environment, were the primary causes of the mental illness. Professional responsibility attitude, COVID-19 training, workplace safety, team spirit, and a few relaxation activities such as deep breathing, reading books, watching movies, and praying, on the other hand, were found to be beneficial for stress coping among nurses. CONCLUSION: Mentally fit nurses are more capable and flexible in the face of any life-threatening outbreak, even if it is very

contagious. Several coping strategies were found to be effective for nurses during the COVID-19 pandemic, whereas problem-specific intervention trials might yield even better results. We should not delay specific mental health interventions to keep them viable and more efficient during a pandemic battlefield, whereas Post-Traumatic Stress Disorder and suicide rates can destroy the entire health care system.

Schug, C., Geiser, F., Hiebel, N., et al. (2022). "Sick Leave and Intention to Quit the Job among Nursing Staff in German Hospitals during the COVID-19 Pandemic." *Int J Environ Res Public Health* **19**(4): 1947.
<https://www.mdpi.com/1660-4601/19/4/1947>

Background: Sick leave and turnover of nurses exacerbate an already existing nursing shortage during the COVID-19 pandemic in Germany and other countries. Frequency and associated factors of sick leave and intention to quit among nurses need to be examined to maintain healthcare. **Methods:** An online survey among nursing staff (N = 757) in German hospitals was conducted between May and July 2021. Sick leave days, intention to quit, working conditions, depression, anxiety and sleep disorder symptoms, effort-reward imbalance (ERI), COVID-19-related and sociodemographic variables were measured. Regression analyses were performed. **Results:** The intention to quit was present in 18.9%. One third (32.5%) reported sick leave of ≥ 10 and 12.3% more than 25 days in 12 months. Significant predictors for ≥ 10 sick leave days were infection with SARS-CoV-2, a pre-existing illness, exhaustion, trust in colleagues and fear of becoming infected. Higher ERI reward levels, perception of sufficient staff and contact with infected patients were associated with lower odds for ≥ 10 sick leave days. Lower reward levels, having changed work departments during the pandemic, working part-time and higher depression levels significantly predicted turnover intention. **Conclusion:** Alarming, many nurses intend to quit working in healthcare. Perceived reward seems to buffer both sick leave and turnover intention. Enhancing protection from COVID-19 and reducing workload might also prevent sick leave. Depression prevention, improved change management and support of part-time workers could contribute to reducing turnover intention among nurses.

Searby, A., Burr, D. et Redley, B. (2022). "The impact of COVID-19 on nurse alcohol consumption: A qualitative exploration." *Canadian Journal of Public Health*. 33, 368–380.

AIMS AND OBJECTIVES: To explore the long-term impact of the COVID-19 pandemic on nurse alcohol consumption. **BACKGROUND:** The COVID-19 pandemic has caused immense disruption to healthcare services worldwide, and nurses have not been immune, experiencing burnout, declining mental health and ultimately, attrition from the profession. Increases in alcohol consumption have been reported across subsections of society, including those with pre-existing mental ill health and experiencing high stress, and exploring this phenomenon in nurses is essential for workforce well-being and sustainability. **DESIGN:** Qualitative descriptive study design. **METHODS:** Secondary analysis of individual, semi-structured interviews with nurses (N = 42) from diverse settings across Australia, including community, primary and hospital settings, conducted in July and August 2021. Data were analysed using structural coding and reported in accordance with the CORE-Q guidelines. **FINDINGS:** Two key themes were found after analysis of the data: (1) factors influencing alcohol consumption (subthemes: workplace factors and external factors), and (2) the pandemic's influence on alcohol consumption (subthemes: increased consumption, moderation of consumption and alcohol as a reward). **CONCLUSIONS:** Several participants described increased alcohol consumption because of the COVID-19 pandemic, particularly due to the stress of working in an environment where resources were scarce. Workplace factors such as overtime, missed breaks and heightened workload were all described as driving stress, and in turn increased alcohol consumption. **RELEVANCE TO CLINICAL PRACTICE:** Increased alcohol consumption has been associated with burnout, absenteeism and intention to leave. The nursing profession is currently undergoing significant continuing stress providing care and management to patients with the SARS-CoV-2 virus, and increased alcohol consumption is a significant threat to personal and workforce well-being, workforce sustainability and quality nursing care.

Ślusarz, R., Cwiekala-Lewis, K., Wysokiński, M., et al. (2022). "Characteristics of Occupational Burnout among Nurses of Various Specialties and in the Time of the COVID-19 Pandemic-Review." Int J Environ Res Public Health **19**(21).

Occupational burnout is particularly common among nurses due to their work being associated with stress, showing understanding, compassion, and commitment, along with the simultaneous need to maintain the necessary emotional distance. The aim of this review was to assess the occurrence and characterization of burnout among nurses working within neurology, geriatric care, intensive care units and with patients infected with the novel COVID-19 virus. PRISMA guidelines were used to conduct the review. The search for literature was limited to articles meeting the inclusion criteria and published from 2017 to 2022 in PubMed, Scopus, Science Direct, Google Scholar, and Wiley. A total of 768 articles from this category have been found. Ultimately, after in-depth analysis, 20 articles were included in the study. The group of respondents ranged from 49 to 3100 participants. According to the data, the percentages of nurses suffering from burnout in the presented research ranged from 14.3% to 84.7%, with the highest value of burnout among nurses who worked in the ICU during the COVID-19 pandemic. There are certain factors among nurses that significantly affect the occurrence of burnout. These include, among others, working time, age, exposure to infection and contact with infected patients, lack of training on COVID-19 prevention, providing care to an increased number of COVID-19 patients per shift, lack of personal protective equipment, lack of support of administration, lack of pay satisfaction, intrinsic motivation and turnover intention.

Toscano, F., Tommasi, F. et Giusino, D. (2022). "Burnout in Intensive Care Nurses during the COVID-19 Pandemic: A Scoping Review on Its Prevalence and Risk and Protective Factors." Int J Environ Res Public Health **19**(19).

BACKGROUND: The COVID-19 pandemic has strained hospitals and healthcare workers engaged in combating the virus with limited knowledge and resources. Intensive care unit (ICU) nurses are among the healthcare workers most affected by the pandemic and are at risk for developing burnout syndrome. **OBJECTIVE:** The present study aims to explore burnout symptoms prevalence among ICU nurses and to identify the individual, organizational, and contextual risk, and protective factors of burnout in ICU nurses during the COVID-19 pandemic. **METHODS:** A scoping review was conducted by searching PubMed, Scopus, and Web of Science. Only papers with empirical data and referred to ICU nurses were included. A total of 350 initial results were yielded, and 40 full texts were screened. Twelve papers constituted the final sample in the analysis. **RESULTS:** High levels of symptoms of burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment) were registered among ICU nurses during the COVID-19 pandemic. Increased workload, lack of equipment, social stigma, and fear of contagion emerged as key risk factors. Social support from leaders and colleagues, professional recognition, use of personal protective tools, and witnessing patients' successful recovery emerged as major protective factors. **CONCLUSIONS:** The results may inform the development of timely actions to counter burnout in ICU nurses during this COVID-19 pandemic and in a post-COVID-19 scenario.

Urban, R. W., Rogers, M. R., Eades, T. L., et al. (2022). "Resilience, Stress, Anxiety, and Depression: Exploring the Mental Health of New Graduate Nurses Transitioning to Practice During COVID-19." Int J Ment Health Nurs **53**(12): 533-543.

Background Transitioning to practice during the COVID-19 pandemic multiplied the stressors and challenges typically encountered by new graduate nurses (NGNs), yet research exploring mental health variables of this subset of nurses remains sparse. Method This study used an observational design and convenience sampling. NGN alumni (n = 192) from a pre-licensure nursing program were surveyed during the summer of 2021 regarding their experiences with resilience, anxiety, depression, and stress while transitioning to practice during the COVID-19 pandemic. Results Participants reported moderate to severe levels of stress (76%), anxiety (27.6%), and depression (31.2%) while transitioning to practice. Most (79%) described themselves as resilient. The highest mean scores for stress, anxiety, and depression occurred during the fourth to eighth month of practice. Conclusion Nursing

professional development specialists, managers, and other stakeholders need effective strategies to monitor and promote NGNs' well-being and mental health to prevent burnout and turnover throughout the first year of practice. [J Contin Educ Nurs. 2022;53(12):533-543.].

Zareei, M., Tabanejad, Z., Oskouie, F., et al. (2022). "Job burnout among nurses during COVID-19 pandemic: A systematic review." J Educ Health Promot **11**: 107.

BACKGROUND: Nurses are in close contact with COVID-19 patients and due to the high risk of infection, they experience fear and anxiety that can result in burnout. This study aimed to review the studies on burnout among nurses during the COVID-19 epidemic. **MATERIALS AND METHODS:** The study followed the guideline for Preferred Reporting Items for Systematic Review and Meta-analysis (PRISMA). Using the keywords: "burnout," "nurse," and "COVID-19" and with the help of Boolean operators, "AND" and "OR" the online databases, namely PubMed, Scopus, Google Scholar, Web of Science, and Science Direct were searched. Articles published from the first of February 2020 to 30 October, 2020 were retrieved. After the quality appraisal, the required data were extracted and analyzed. **RESULTS:** Out of 85 articles identified in the initial search, and after removing duplicates and those that did not have the required data, seven articles entered the analysis. Among these articles, four (57.14%) reported moderate burnout and three articles (42.86) reported high level of burnout among nurses during the COVID-19 pandemic. **CONCLUSIONS:** A majority of the studies reported that nurses experienced a moderate level of burnout during the COVID-19 pandemic. Given the prevalence of burnout in nurses and because nurses are the largest portion of the healthcare providers who are in close contact with patients infected by COVID-19, it is necessary for health care policymakers to adopt strategies for preventing or reducing burnout among nurses.

Zhao, S., Long, F., Wei, X., et al. (2022). "The Effect of Regional Factors on the Mental Health Status of Frontline Nurses and Patients With COVID-19 During COVID-19: The Role of Depression and Anxiety." Front Public Health **10**: 857472.

At the end of 2019, Wuhan, Hubei Province, China, experienced the ravages of Coronavirus disease 2019 (COVID-19). In a few months, infected people rose to tens of thousands. This study aimed to explore the mental health status of military nurse personnel assisting (non-Hubei area) in the fight against COVID-19 and local nurse personnel (in the Wuhan area), as well as the differences in mental health status between nurses and COVID-19 patients that provide a reference basis for psychological crisis intervention. A convenience sampling method was used to select frontline nurses and COVID-19 patients (sample size 1,000+) from two mobile cabin hospitals from January to March 2020. The questionnaire consists of socio-demographic information, Patient Health Questionnaire 9 (PHQ-9), Generalized Anxiety Disorder 7 (GAD-7), General Mental Health Service Questionnaire and Work Intensity and Physical Status Questionnaire. The results showed that depression was present in 117 nurses (19.73%) and 101 patients (23.33%) with PHQ-9 scores >10; anxiety was present in 60 nurses (10.12%) and 54 patients (12.47%) with GAD-7 >10. The anxiety and depression levels of nurses in Wuhan area were higher than those in non-Hubei area. The differences in PHQ-9 and GAD-7 scores were also statistically significant ($p < 0.001$) when comparing patients from different regions, with anxiety and depression rates of 30.19 and 16.04% in local patients and 16.74 and 9.50% in foreign patients. The comparison between nurses and patients showed that the nurses were more depressed than the patients, while the patients were more anxious. Local nurses in Wuhan had a higher workload intensity than aid nurses (77.72 vs. 57.29%). Over 95% of frontline nurses and patients reported that they had not received any form of psychological counseling before the COVID-19 outbreak. 12.87% (26/194) of frontline nurses in Wuhan had a history of taking hypnotic drugs. However, fewer patients (16/212, 7.55%) took medication than frontline nurses. Anxiety and depression levels were far higher among local nurses and patients in Wuhan than in non-Hubei areas. The nurses had higher levels of depression, while the patients had higher anxiety levels. Providing targeted mental health services to healthcare professionals and patients is necessary when experiencing the impact of a major event.

Al Maqbal, M., Al Sinani, M. et Al-Lenjawi, B. (2021). "Prevalence of stress, depression, anxiety and sleep disturbance among nurses during the COVID-19 pandemic: A systematic review and meta-analysis." J Psychosom Res **141**: 110343.

BACKGROUND: The new coronavirus disease's (COVID-19) high risk of infection can increase the workload of healthcare workers, especially nurses, as they are most of the healthcare workforce. These problems can lead to psychological problems. Therefore, the aim of this systematic review and meta-analysis to ascertain the present impact of the COVID-19 outbreak on the prevalence of stress, anxiety, depression and sleep disturbance among nurses. **METHODS:** A systematic review and meta-analysis were conducted. The following databases were searched: PubMed, CHINAL, MEDLINE, EMBASE, PsycINFO, MedRxiv and Google Scholar, from January 2020 up to 26th October 2020. Prevalence rates were pooled with meta-analysis using a random-effects model. Heterogeneity was tested using I-squared (I²) statistics. **RESULTS:** A total of 93 studies (n = 93,112), published between January 2020 and September 2020, met the inclusion criteria. The overall prevalence of stress was assessed in 40 studies which accounted for 43% (95% CI 37-49). The pooled prevalence of anxiety was 37% (95% CI 32-41) in 73 studies. Depression was assessed in 62 studies, with a pooled prevalence of 35% (95% CI 31-39). Finally, 18 studies assessed sleep disturbance and the pooled prevalence was 43% (95% CI 36-50). **CONCLUSION:** This meta-analysis found that approximately one third of nurses working during the COVID-19 epidemic were suffering from psychological symptoms. This highlights the importance of providing comprehensive support strategies to reduce the psychological impact of the COVID-19 outbreak among nurses under pandemic conditions. Further longitudinal study is needed to distinguish of psychological symptoms during and after the infectious disease outbreaks.

Altmayer, V., Weiss, N., Cao, A., et al. (2021). "Coronavirus disease 2019 crisis in Paris: A differential psychological impact between regular intensive care unit staff members and reinforcement workers." Aust Crit Care **34**(2): 142-145.

BACKGROUND: Intensive care unit (ICU) healthcare workers (HCWs) are at the forefront of the coronavirus disease 2019 pandemic. To overcome the lack of human resources during this crisis, some ICUs had to mobilise staff from a reinforcement pool, with no or outdated ICU experience. This study aimed to investigate and to compare the psychological impact of the pandemic on regular ICU staff members and reinforcement workers. **MATERIAL AND METHODS:** Self-assessment questionnaires were completed by HCWs who worked from March 1 to April 30, 2020, in our 16-bed neurological ICU at La Pitié-Salpêtrière Hospital in Paris, France, which was converted to a COVID ICU. The Hospital Anxiety and Depression Scale, the Post-traumatic Stress Disorder Checklist for DSM-5, McGill Quality of Life Questionnaire-Revised, and 10-item Connor-Davidson Resilience Scale were used to assess anxiety, depression and post-traumatic stress disorder, quality of life, and resilience, respectively. **RESULTS:** Sixty-nine ICU HCWs completed the survey (37 from the team of regular staff members, i.e., from the public health service, and 32 from a reinforcement pool, either from non-ICU public health service or from private healthcare interim employment agencies). Prevalence of anxiety, depression, and post-traumatic stress disorder symptoms was high, at 19%, 9%, and 16%, respectively, with limited impairment in quality of life or resilience scores. Depression symptoms were observed more in regular staff members than in welcomed reinforcement workers, at 16% and 0%, respectively. **CONCLUSIONS:** These results revealed that during the pandemic, HCWs from the team of regular staff members were at greater risk of developing psychological disorder compared with reinforcement workers, with higher levels of depressive symptoms.

Banitalebi, S., Mohammadi, K., Marjanian, Z., et al. (2021). "The effect of COVID-19 epidemic on the mental health of nurses' family members." J Educ Health Promot **10**: 368.

BACKGROUND: The COVID-19 epidemic is a global health crisis that, in addition to physical health, has affected the mental health of all individuals, especially health-care workers, including nurses and family members. In this regard, the present study aimed to investigate the effect of COVID-19 epidemic on mental health of nurses' family members. **MATERIALS AND METHODS:** The present descriptive-analytic and cross-sectional study was conducted in 2020 year on family members of

nurses working in Hajar Hospital for admission and hospitalization of patients with COVID-19, after obtaining the necessary permits and coordination. To prevent the spread of COVID-19 through respiratory or contact droplets, a blog was designed to collect data using software. Participation in this study was voluntary. Data collection tools included consent, demographic questionnaire, and mental health questionnaire (Patient Health Questionnaire-9). Data were analyzed by SPSS version 22. RESULTS: Findings of this study showed that out of 208 family members of nurses participating in this study, 96 were male and 112 were female and their mean age was 35.78 years, and 55.3% of the participants had university education. Their mean mental health score was 12.91 ± 3.75 , so that 22.6% of people had mild depression, 71.4% of people had moderate depression, and 1.8% of people had severe depression. Independent t-test showed that there is a statistically significant relationship between mental health and gender and marital status ($P < 0.001$). Furthermore, one-way analysis of variance test showed that there is a significant relationship between mental health and age ($P < 0.001$); this test also showed that there is no relationship between education and mental health ($P = 0.75$). CONCLUSION: The results indicate that the mental health of nurses' family members is affected by the challenges of COVID-19 epidemic time, so that many of them suffer from some degree of depression. Therefore, supporting this population requires urgent action.

Bernard, L., Béviard-Charrière, Q., Taha, S., et al. (2021). "Une revue intégrative de l'identité populaire de l'infirmière durant la pandémie de la COVID-19." *Recherche en soins infirmiers* **145**(2): 91-103.

<https://www.cairn.info/revue-recherche-en-soins-infirmiers-2021-2-page-91.htm>

Contexte : le contexte actuel lié à la COVID-19 place les infirmières au cœur de la pandémie car elles assurent un rôle essentiel auprès de la population. Toutefois, les discours médiatiques et professionnels influencent l'identité et la pratique clinique des infirmières. Objectif : recenser et analyser les écrits traitant de la construction d'une identité populaire de l'infirmière et de ses rôles en temps de pandémie liée à la COVID-19. Méthode : les sources de données Eurêka, Google News, Education Resources Information Center (ERIC), Sociological Abstracts, Cumulative Index to Nursing Information and Allied Health Literature (CINAHL), MEDLINE et Social Sciences Abstracts ont été consultées. Des recherches manuelles sur les sites gouvernementaux et professionnels ont été ajoutées. Résultats : sur un total de 281 écrits répertoriés, 73 ont été retenus. L'analyse des écrits a permis de dégager les thèmes suivants : les images identitaires des infirmières durant cette pandémie et leurs rôles professionnels. Les discours autant médiatiques que politiques sont parfois paradoxaux. Ces derniers semblent influencer la pratique clinique infirmière qui se voit attribuer de nouveaux rôles. Conclusion : cet article permet de sensibiliser les décideurs aux rôles multiples des infirmières et à l'image qu'a le public de ces dernières en temps de pandémie, et de porter un regard critique sur les discours populaires en lien avec l'identité infirmière et sa modulation en temps de pandémie.

Caruso, R., Annaloro, C., Arrigoni, C., et al. (2021). "Burnout and post-traumatic stress disorder in frontline nurses during the COVID-19 pandemic: a systematic literature review and meta-analysis of studies published in 2020." *Acta Biomed* **92**(S2): e2021428.

This study aimed to systematically synthesize evidence regarding burnout and post-traumatic stress disorder (PTSD) among nurses engaged in the frontline during the COVID-19 pandemic, highlighting their risk and protective factors. The specific literature on nurses' mental health outcomes still remains not synthesized. A systematic review was performed (PROSPERO: CRD42021227939), searching literature published in 2020 on Pubmed, Scopus, CINAHL, and PsycInfo. We quantitatively pooled means of included studies measuring burnout and PTSD with the same tools. Twenty-five studies were included in this review. Seven (3766 nurses) were included in the meta-analysis for estimating means of depersonalization and emotional exhaustion assessed using the Maslach Burnout Inventory, respectively: 7,40 (95%CI=6,00-8,80) and 22,82 (95%CI=19,24-26,41). Likely, 12 studies were used to estimate two pooled means for PTSD, one for six studies adopting the Impact of Event Scale-Revised (1551 nurses), and six adopting the PTSD Scale for DSM-5 (8547 nurses). The main risk and protective factors of both outcomes were female sex and younger age, work-related variables, and physical and mental factors, such as concerns, skin lesions from wearing personal protective equipment. This systematic review portrayed the situation described in literature during 2020 on

nurses' burnout and PTSD during the COVID-19 pandemic. Although the outcomes' levels described in the included studies are diverse, the broad situation appears alarming, and supportive multi-level strategies, considering individual and system-level, should be planned to decrease the described worsening scenario within the clinical settings avoid middle and long-term negative consequences.

Chandler-Jeanville, S. (2021). "Perceptions and Experiences of the COVID-19 Pandemic amongst Frontline Nurses and Their Relatives in France in Six Paradoxes: A Qualitative Study." *J Clin Nurs* **18**(13).

Due to their frontline position to fight the coronavirus disease 2019 (COVID-19), the professional and personal life of nurses was severely disrupted. To understand and describe their lived experiences and perceptions during the pandemic's first wave in France, we interviewed 49 nurses, including 16 nursing students, and 48 of their family members from June to July 2020. Using a purposeful sampling, the semi-structured interviews were scripted according to Abric's method with probing questions. The interview analysis led to the identification of six paradoxical perceptions concerning the pandemic's consequences: the Silence Paradox, the Hero Paradox, the Workforce Paradox, the Learning Paradox, the Symbolic Exchange Paradox, and the Uncertainty Paradox. However, despite different experiences, the nurses perceived their frontline position both as a burden jeopardizing their safety and well-being and as a spotlight of nurses' tough working conditions. Indeed, because they were in the frontline position, nurses and nursing students were psychologically vulnerable, even more so when they felt alone and inadequately protected. Besides, their families were vulnerable too, as they were also exposed to the consequences of the nurses' frontline engagement. Thus, to preserve their safety and well-being, institutions should also provide them with better organizational support and inclusive leadership, without neglecting their families.

Ching, S. M., Ng, K. Y., Lee, K. W., et al. (2021). "Psychological distress among healthcare providers during COVID-19 in Asia: Systematic review and meta-analysis." *PLoS One* **16**(10): e0257983.

INTRODUCTION: COVID-19 pandemic is having a devastating effect on the mental health and wellbeing of healthcare providers (HCPs) globally. This review is aimed at determining the prevalence of depression, anxiety, stress, fear, burnout and resilience and its associated factors among HCPs in Asia during the COVID-19 pandemic. MATERIAL AND METHODS: We performed literature search using 4 databases from Medline, Cinahl, PubMed and Scopus from inception up to March 15, 2021 and selected relevant cross-sectional studies. Publication bias was assessed using funnel plot. Random effects model was used to estimate the pooled prevalence while risk factors were reported in odds ratio (OR) with 95% CI. RESULTS: We included 148 studies with 159,194 HCPs and the pooled prevalence for depression was 37.5% (95%CI: 33.8-41.3), anxiety 39.7(95%CI: 34.3-45.1), stress 36.4% (95%CI: 23.2-49.7), fear 71.3% (95%CI: 54.6-88.0), burnout 68.3% (95%CI: 54.0-82.5), and low resilience was 16.1% (95%CI: 12.8-19.4), respectively. The heterogeneity was high ($I^2 > 99.4\%$). Meta-analysis reported that both females (OR = 1.48; 95% CI = 1.30-1.68) and nurses (OR = 1.21; 95%CI = 1.02-1.45) were at increased risk of having depression and anxiety [(Female: OR = 1.66; 95% CI = 1.49-1.85), (Nurse: OR = 1.36; 95%CI = 1.16-1.58)]. Females were at increased risk of getting stress (OR = 1.59; 95%CI = 1.28-1.97). CONCLUSION: In conclusion, one third of HCPs suffered from depression, anxiety and stress and more than two third of HCPs suffered from fear and burnout during the COVID-19 pandemic in Asia.

Foye, U., Dalton-Locke, C., Harju-Seppänen, J., et al. (2021). "How has COVID-19 affected mental health nurses and the delivery of mental health nursing care in the UK? Results of a mixed-methods study." *J Psychiatr Ment Health Nurs* **28**(2): 126-137.

French, R., Clark, R. R. S., Rogowski, J. A., et al. (2021). "Impact of COVID-19 outbreak on nurses' mental health: A prospective cohort study." *J Adv Nurs* **194**: 110620.

OBJECTIVES: To evaluate variations in nurses' sleep quality and symptoms of depression, anxiety and stress during the COVID-19 outbreak, and to evaluate whether the presence of potential risk factors influenced these symptoms over time. METHODS: This prospective cohort study surveyed nurses three

times - surveying personal factors, working conditions, family dynamics, and attitude towards COVID-19 - between March 31 and May 4, 2020. Nurses' mental health was assessed through Depression Anxiety Stress Scales - short version (DASS-21); their sleep quality was assessed through a 5-point Likert scale question. RESULTS: Nurses' sleep quality and symptoms of depression, anxiety and stress presented a positive variation over the COVID-19 outbreak. The only factors which are directly related to the COVID-19 outbreak and that were associated with the positive variation in nurses' symptoms of depression, anxiety and stress were the fear to infect others and the fear to be infected (higher fear of being infected or to infect someone corresponded to increased symptoms of depression, anxiety and stress). CONCLUSIONS: Although the COVID-19 outbreak seems to have had an immediate impact on nurses' mental health, a psychological adaptation phenomenon was also observed. Future research should focus on assessing nurses' symptoms of depression, anxiety and stress, after the COVID-19 pandemic, in order to compare and contrast the findings with the results of our study.

Galanis, P., Vraka, I., Fragkou, D., et al. (2021). "Nurses' burnout and associated risk factors during the COVID-19 pandemic: A systematic review and meta-analysis." *J Adv Nurs* **77**(8): 3286-3302.

AIMS: To examine the nurses' burnout and associated risk factors during the COVID-19 pandemic. DESIGN: We followed the Cochrane criteria and the Preferred Reporting Items for Systematic Reviews and Meta-Analysis guidelines for this systematic review and meta-analysis. DATA SOURCES: PubMed, Scopus, ProQuest, Cochrane COVID-19 registry, CINAHL and pre-print services (medRxiv and PsyArXiv) were searched from January 1 to November 15, 2020 and we removed duplicates. REVIEW METHODS: We applied a random effect model to estimate pooled effects since the heterogeneity between results was very high. RESULTS: Sixteen studies, including 18,935 nurses met the inclusion criteria. The overall prevalence of emotional exhaustion was 34.1%, of depersonalization was 12.6% and of lack of personal accomplishment was 15.2%. The main risk factors that increased nurses' burnout were the following: younger age, decreased social support, low family and colleagues readiness to cope with COVID-19 outbreak, increased perceived threat of Covid-19, longer working time in quarantine areas, working in a high-risk environment, working in hospitals with inadequate and insufficient material and human resources, increased workload and lower level of specialized training regarding COVID-19. CONCLUSION: Nurses experience high levels of burnout during the COVID-19 pandemic, while several sociodemographic, social and occupational factors affect this burnout. IMPACT: We found that burnout among nurses is a crucial issue during the COVID-19 pandemic. There is an urgent need to prepare nurses to cope better with COVID-19 pandemic. Identification of risk factors for burnout could be a significant weapon giving nurses and health care systems the ability to response in a better way against the following COVID-19 waves in the near future.

Galletta, M., Piras, I., Finco, G., et al. (2021). "Worries, Preparedness, and Perceived Impact of Covid-19 Pandemic on Nurses' Mental Health." *Nurs Forum* **9**: 566700.

Background: In times of global public health emergency, such as the COVID-19 pandemic, nurses stand at the front line, working in close contact with infected individuals. Being actively engaged in fighting against COVID-19 exposes nurses to a high risk of being infected but can also have a serious impact on their mental health, as they are faced with excessive workload and emotional burden in many front-line operating contexts. Purpose: The aim of the study is to analyze how risk factors such as perceived impact, preparedness to the pandemic, and worries were associated with mental health outcomes (crying, rumination and stress) in nurses. Methods: A cross-sectional study design was performed via an online questionnaire survey. Participants included 894 registered nurses from Italy. Participation was voluntary and anonymous. Multiple binary logistic regression was carried out to analyze the relationship between risk factors and health outcomes. Results: Increased job stress was related to higher levels of rumination about the pandemic (OR = 4.04, $p < 0.001$), job demand (OR = 2.00, $p < 0.001$), impact on job role (OR = 2.56, $p < 0.001$), watching coworkers crying at work (OR = 1.50, $p < 0.05$), non-work-related concerns (OR = 2.28, $p < 0.001$), and fear of getting infected (OR = 2.05, $p < 0.001$). Job stress (OR = 2.52, $p < 0.01$), rumination (OR = 2.28, $p < 0.001$), and watching colleagues crying (OR = 7.92, $p < 0.001$) were associated with crying at work. Rumination was associated with caring for patients who died of COVID-19 (OR = 1.54, $p < 0.05$), job demand (OR = 1.70, $p < 0.01$),

watching colleagues crying (OR = 1.81, $p < 0.001$), non-work-related worries (OR = 1.57, $p < 0.05$), and fear of getting infected (OR = 2.02, $p < 0.001$). Conclusions: The psychological impact that this pandemic may cause in the medium/long term could be greater than the economical one. This is the main challenge that health organizations will have to face in the future. This study highlights that the perceived impact and worries about the pandemic affect nurses' mental health and can impact on their overall effectiveness during the pandemic. Measures to enhance nurses' protection and to lessen the risk of depressive symptoms and post-traumatic stress should be planned promptly.

Havaei, F., Ma, A. et Staempfli, S. (2021). "Nurses' Workplace Conditions Impacting Their Mental Health during COVID-19: A Cross-Sectional Survey Study." *Healthcare* 9(1). 84

Among health workers, nurses are at the greatest risk of COVID-19 exposure and mortality due to their workplace conditions, including shortages of personal protective equipment (PPE), insufficient staffing, and inadequate safety precautions. The purpose of this study was to examine the impact of COVID-19 workplace conditions on nurses' mental health outcomes. A cross-sectional correlational design was used. An electronic survey was emailed to nurses in one Canadian province between June and July of 2020. A total of 3676 responses were included in this study. We found concerning prevalence rates for post-traumatic stress disorder (47%), anxiety (38%), depression (41%), and high emotional exhaustion (60%). Negative ratings of workplace relations, organizational support, organizational preparedness, workplace safety, and access to supplies and resources were associated with higher scores on all of the adverse mental health outcomes included in this study. Better workplace policies and practices are urgently required to prevent and mitigate nurses' suboptimal work conditions, given their concerning mental health self-reports during the COVID-19 pandemic.

Hummel, S. et Oetjen, N. (2021). "Mental Health Among Medical Professionals During the COVID-19 Pandemic in Eight European Countries: Cross-sectional Survey Study." *MJ Med Internet Research Care Res Rev* 23(1): e24983.

BACKGROUND: The death toll of COVID-19 topped 170,000 in Europe by the end of May 2020. COVID-19 has caused an immense psychological burden on the population, especially among doctors and nurses who are faced with high infection risks and increased workload. **OBJECTIVE:** The aim of this study was to compare the mental health of medical professionals with nonmedical professionals in different European countries during the COVID-19 pandemic. We hypothesized that medical professionals, particularly those exposed to COVID-19 at work, would have higher levels of depression, anxiety, and stress. We also aimed to determine their main stressors and most frequently used coping strategies during the crisis. **METHODS:** A cross-sectional online survey was conducted during peak COVID-19 months in 8 European countries. The questionnaire included demographic data and inquired whether the participants were exposed to COVID-19 at work or not. Mental health was assessed via the Depression Anxiety Stress Scales³² (23.53)-21 (DASS-21). A 12-item checklist on preferred coping strategies and another 23-item questionnaire on major stressors were completed by medical professionals. **RESULTS:** The sample (N=609) consisted of 189 doctors, 165 nurses, and 255 nonmedical professionals. Participants from France and the United Kingdom reported experiencing severe/extremely severe depression, anxiety, and stress more often compared to those from the other countries. Nonmedical professionals had significantly higher scores for depression and anxiety. Among medical professionals, no significant link was reported between direct contact with patients with COVID-19 at work and anxiety, depression, or stress. "Uncertainty about when the epidemic will be under control" caused the most amount of stress for health care professionals while "taking protective measures" was the most frequently used coping strategy among all participants. **CONCLUSIONS:** COVID-19 poses a major challenge to the mental health of working professionals as a considerable proportion of our participants showed high values for depression, anxiety, and stress. Even though medical professionals exhibited less mental stress than nonmedical professionals, sufficient help should be offered to all occupational groups with an emphasis on effective coping strategies.

Isaac, C., Castillo, M. C., Motut, A., et al. (2021). "Impact psychologique du confinement sur le personnel hospitalier en psychiatrie." L'Information Psychiatrique **97**(10): 865-873.

<p>La crise sanitaire liée à la Covid-19 pourrait entraîner chez les professionnels de santé une détresse émotionnelle et des troubles anxiodépressifs, et cela même en dehors des unités de soins prenant en charge la Covid-19. Nous avons évalué 197 membres du personnel d'un hôpital psychiatrique au moyen d'une enquête en ligne, durant le premier confinement de la pandémie de Covid-19. Les femmes, les infirmiers et aides-soignants et les personnes en arrêt de travail présentaient davantage de manifestations anxiodépressives. Par ailleurs, le manque d'information sur la situation sanitaire était un facteur de risque de dépression et d'anxiété. Les facteurs de risques identifiés suggèrent la nécessité de prendre en charge précocement les personnes à risque et d'assurer un suivi rapproché et une information du personnel soignant afin de prévenir les troubles anxiodépressifs.

Kameg, B. N., Fradkin, D., Lee, H., et al. (2021). "Mental wellness among psychiatric-mental health nurses during the COVID-19 pandemic." Rev Gaucha Enferm **35**(4): 401-406.

Psychiatric nursing providers and their unique challenges in the face of the COVID-19 pandemic are not well-represented in the literature. Therefore, this study sought to describe mental well-being of psychiatric nurses, and sought to elucidate factors related to mental wellness during the COVID-19 pandemic. This study utilized cross-sectional survey methodology to evaluate burnout, mental wellness, COVID-related anxiety, professional fulfillment, depressive symptoms, and anxiety symptoms among psychiatric nurses. There was a total of 151 respondents. A linear regression model was employed to identify predictors of mental wellness. The final regression model included the following predictors: depressive symptoms, burnout, professional fulfillment, and educational status. These predictors together accounted for 73% of the variance for the outcome variable of mental well-being.

De Kock, J. H., Latham, H. A., Leslie, S. J., et al. (2021). "A rapid review of the impact of COVID-19 on the mental health of healthcare workers: implications for supporting psychological well-being." BMC public health **21**(1): 1-18.

Nemati, R., Moradi, A., Marzban, M., et al. (2021). "The association between moral distress and mental health among nurses working at selected hospitals in Iran during the COVID-19 pandemic." Work **70**(4): 1039-1046.

BACKGROUND: In the event of an epidemic outbreak, the mental health of medical staff, including nurses who serve on the frontlines of hospitals, can be affected; thus, the identification of factors affecting nurses' mental health is of importance. OBJECTIVE: This study aimed to examine the association between moral distress and the mental health of nurses working at four selected hospitals in Iran during the coronavirus disease 2019 (COVID-19) pandemic. METHODS: A cross-sectional questionnaire survey was conducted on 296 nurses working at the selected hospitals in Bushehr and Shiraz (south of Iran) at the time of the COVID-19 outbreak. The collected data were analyzed via logistic regression analysis. RESULTS: The mean scores for nurses' moral distress were low (54.31 ± 24.84). The results of this study indicated more symptoms of mental issues among nurses (73.60%). Moreover, a significant association was observed between mental health and moral distress. Among the examined demographic variables, only gender had a significant association with mental health (p -value=0.014). CONCLUSION: The results of this study indicated that an increase in moral distress would lead to a significant increase in mental health issues of the examined nurses. Nurse managers and hospital policymakers should develop strategies to enhance nurses' level of mental health, as well as providing adequate emotional and family support for nurses. Considering the intensifying role of gender in this association, timely interventions are necessary to reduce the negative effects of workplace pressure/stress on female nurses.

Ramirez-Vargas, G., Havaei, F., Smith, P., et al. (2021). "The impact of the COVID-19 pandemic on mental health of nurses in British Columbia, Canada using trends analysis across three time points." Int J Environ Res Public Health **62**: 7-12.

PURPOSE: This study examined trends over time in the prevalence of anxiety and depression among Canadian nurses: 6 months before, 1-month after, and 3 months after COVID-19 was declared a pandemic. **METHODS:** This study adopted a repeated cross-sectional design and surveyed unionized nurses in British Columbia (BC), Canada on three occasions: September 2019 (Time 1, prepandemic), April 2020 (Time 2, early-pandemic) and June 2020 (Time 3). **RESULTS:** A total of 10,117 responses were collected across three timepoints. This study found a significant increase of 10% to 15% in anxiety and depression between Time 1 and 2, and relative stability between Time 2 and 3, with Time 3 levels still higher than Time 1 levels. Cross-sector analyses showed similar patterns of findings for acute care and community nurses. Long-term care nurses showed a two-fold increase in the prevalence of anxiety early pandemic, followed by a sharper decline mid pandemic. **CONCLUSIONS:** COVID-19 has had short- and mid-term mental health implications for BC nurses particularly among those in the long-term care sector. Future research should evaluate the impact of COVID-19 on the mental health of health workers in different contexts, such as jurisdictional analyses, and better understand the long-term health and labor market consequences of elevated mental health symptoms over an extended time period.

Riedel, B., Horen, S. R., Reynolds, A., et al. (2021). "Mental Health Disorders in Nurses During the COVID-19 Pandemic: Implications and Coping Strategies." *Front Public Health* 9: 707358.

Nurses caring for patients who contract coronavirus disease 2019 (COVID-19) have experienced significant traumas in the form of increased workloads, negative patient outcomes, and less social support system access. Nurses should be provided with information regarding early detection, coping skills and treatment for anxiety, depression, post-traumatic stress syndrome (PTSS)/post-traumatic stress disorder (PTSD), and other mental health disorders. Early intervention is important as mental health disorders can cause dysfunction, internal suffering, and in the most extreme situations, lead to death if not properly cared for. Healthcare corporations should consider providing coverage for mental health treatment for employees who experience COVID-19 traumas. With the implementation of healthy coping skills and therapeutic intervention, nurses will be able to let go of the negative impacts that the COVID-19 pandemic has caused and reintegrate into their roles as caring and entrusted health care providers. The current paper evaluates the mental health disorders encountered by nurses in the COVID-19 era based on the current medical literature and aims to provide practical coping strategies.

Sainsaulieu, I. (2021). "Mobilisations soignantes par gros temps : quelle prise de risque organisationnelle ?" *Revue Française Des Affaires Sociales*(4): 97-109.
<https://www.cairn.info/revue-francaise-des-affaires-sociales-2021-4-page-97.htm>

En France, la prise de risque des personnels soignants a été saluée face à la pandémie. La mobilisation soignante n'est pas, en effet, un état naturel, inhérent à une activité professionnelle, comme ont pu le penser les (rares) personnes qui refusaient de les applaudir au balcon (« Ils ne font que leur boulot ! »). Se mobiliser contre la pandémie, c'est surtout prendre le risque d'un état de fatigue important. D'ailleurs, à l'hôpital, les infirmières étaient volontaires pour aller travailler dans les « services covidés ». Face à la seconde vague fin 2020, les soignants rencontrés accusaient le coup. À la troisième vague, au printemps 2021, les absences pour maladie ont augmenté, à l'exemple du CHU-Est de la France. Quant au risque de contagion, dans le même établissement, un millier de soignants au total ont contracté le virus, heureusement sans décès qui lui soient imputables. Si l'on y ajoute les conditions de travail ordinaire (le rythme du travail, le manque de lits et de personnels), on peut conclure à la prise de risque globale et supplémentaire d'un personnel hospitalier déjà réputé dur à l'épreuve. Quelle prise de risque organisationnelle, côté hiérarchie ? Alors que les personnels étaient mobilisés dans les services covidés, l'organisation du travail a-t-elle su prendre en compte ce nouvel apport, bousculer un peu la césure hiérarchique et inclure les personnels dans la prise de décision ?

Sánchez-Sánchez, E., García-Álvarez, J., García-Marín, E., et al. (2021). "Impact of the COVID-19 Pandemic on the Mental Health of Nurses and Auxiliary Nursing Care Technicians-A Voluntary Online Survey." Int J Environ Res Public Health **18**(16). 8310

Pandemics impose an immense psychological burden on healthcare workers due to a combination of workplace stressors and personal fears. Nurses and auxiliary nursing care technicians (ANCTs) are on the front line of this pandemic and form the largest group in healthcare practice. The aim of this study is to determine the symptoms of depression and/or anxiety among nurses and ANCTs during the periods known as the first wave (March-June) and second wave (September-November) of the COVID-19 pandemic in Spain. An observational cross-sectional study was carried out using an anonymous, self-administered questionnaire among nurses and ANCTs practising in Spain. During the first period, 68.3% and 49.6% of the subjects presented anxiety and depression, respectively, decreasing in the second period (49.5% for anxiety and 35.1% for depression). There were statistically significant differences between the different categories and periods ($p < 0.001$). The COVID-19 pandemic has negatively influenced mental health in nurses and ANCTs. Mental health should be monitored and coping strategies promoted to improve the health, productivity and efficiency of these professionals.

Shah, M., Roggenkamp, M., Ferrer, L., et al. (2021). "Mental Health and COVID-19: The Psychological Implications of a Pandemic for Nurses." Clin J Oncol Nurs **25**(1): 69-75.

BACKGROUND: The risk of psychological effects from the COVID-19 pandemic is significant and manifests as stress, anxiety, depression, sleeplessness, and, in some cases, suicide. The need for psychological support services for healthcare providers should be included in all pandemic and disaster planning. OBJECTIVES: The aim of this article is to explore the potential psychological sequelae of nursing during a pandemic and to provide recommendations to support a psychologically healthy work environment. METHODS: Highlights from the literature on psychological sequelae, symptoms, and outcomes related to COVID-19 and prior pandemics is presented, along with insight from the experiences of oncology nurses caring for patients with COVID-19. FINDINGS: Destigmatizing mental health needs for healthcare providers empowers them to seek support. Hospital administrators must develop proactive wellness plans for the triage and management of mental and emotional health needs during a pandemic that prioritize transparent communication, resources for healthcare providers within and beyond the clinical setting, and training.

Sriharan, A., West, K. J., Almost, J., et al. (2021). "COVID-19-Related Occupational Burnout and Moral Distress among Nurses: A Rapid Scoping Review." Nurs Leadersh (Tor Ont) **34**(1): 7-19.

BACKGROUND: The COVID-19 pandemic is placing unprecedented pressure on a nursing workforce that is already under considerable mental strain due to an overloaded system. Convergent evidence from the current and previous pandemics indicates that nurses experience the highest levels of psychological distress compared with other health professionals. Nurse leaders face particular challenges in mitigating risk and supporting nursing staff to negotiate moral distress and fatigue during large-scale, sustained crises. Synthesizing the burgeoning literature on COVID-19-related burnout and moral distress faced by nurses and identifying effective interventions to reduce poor mental health outcomes will enable nurse leaders to support the resilience of their teams. AIM: This paper aims to (1) synthesize existing literature on COVID-19-related burnout and moral distress among nurses and (2) identify recommendations for nurse leaders to support the psychological needs of nursing staff. METHODS: Comprehensive searches were conducted in Medline, Embase and PsycINFO (via Ovid); CINAHL (via EBSCOHost); and ERIC (via ProQUEST). The rapid review was completed in accordance with the World Health Organization Rapid Review Guide. KEY FINDINGS: Thematic analysis of selected studies suggests that nurses are at an increased risk for stress, burnout and depression during the ongoing COVID-19 pandemic. Younger female nurses with less clinical experience are more vulnerable to adverse mental health outcomes.

Varghese, A., George, G., Kondaguli, S. V., et al. (2021). "Decline in the mental health of nurses across the globe during COVID-19: A systematic review and meta-analysis." J Glob Health **11**: 05009.

BACKGROUND: Nurses represent the major proportion of frontline health care professionals delivering 24/7 services to patients with an increased vulnerability towards COVID-19 infection. Mental health issues among nurses during the COVID-19 pandemic are poorly reported across the globe. Henceforth, a systematic review and meta-analysis was performed to explore the prevalence and determinants of mental health outcomes (anxiety, stress, depression, PTSD, insomnia) among nurses across the globe due to the COVID-19. **METHODS:** A PRISMA compliant systematic review (PROSPERO-CRD 42020204120) was carried out to identify articles from multiple databases reporting the prevalence of mental health outcomes among nurses. Proportion random effect analysis, I(2) statistic, quality assessment, and sensitivity analysis were carried out. **RESULTS:** Pooled data on mental health outcomes were generated from 25 cross-sectional studies: 32% anxiety (95% confidence interval (CI) = 21%-44%, n (number of studies) = 21, N (sample size) = 13 641), 40.6% stress (95% CI = 25.4%-56.8%, n = 10, N = 4204), 32% depression (95% CI = 21%-44%, n = 17, N = 12 294), 18.6% PTSD (95% CI = 4.8%-38%, n = 3, N = 638), 38.3% insomnia (95% CI = 5.8%-78.6%, n = 2, N = 261) and significant risk factors for mental ailments includes; caring for COVID-19 patients, being a female, low self-efficacy, resilience, social support and having physical symptoms (sore-throat, breathlessness, cough, lethargy, myalgia, fever). **CONCLUSION:** The study results highlighted a higher proportion of poor mental health outcomes namely, anxiety, stress, depression, PTSD and insomnia among nurses from different parts of the world. Poor mental health outcomes among nurses warrants the need to implement proactive psychological interventions to deter the collapse of health care systems in responding to the pandemic and in particular all possible efforts should be undertaken to mitigate the risk factors. Health care organizations should provide support to nurses with sufficient flexibility. The disaster preparedness plan envisaged by nations should have provisions to address the mental health of nurses. Greater investment in addressing the global shortage of nurses should be given priority in national health policies. Attractive salary packages should be offered to nurses to prevent their emigration from low- and middle-income countries (LMICs). **REGISTRATION:** PROSPERO (CRD42020204120).

Wu, T., Jia, X., Shi, H., et al. (2021). "Prevalence of mental health problems during the COVID-19 pandemic: A systematic review and meta-analysis." *J Affect Disord* **281**: 91-98.

Arnetz, J. E., Goetz, C. M., Sudan, S., et al. (2020). "Personal Protective Equipment and Mental Health Symptoms Among Nurses During the COVID-19 Pandemic." *J Occup Environ Med* **62**(11): 892-897.

OBJECTIVE: To determine the association between access to adequate personal protective equipment (PPE) and mental health outcomes among a sample of U.S. nurses. **METHODS:** An online questionnaire was administered in May 2020 to Michigan nurses via three statewide nursing organizations (n=695 respondents). Multivariable logistic regression analysis was used to identify factors associated with mental health symptoms. **RESULTS:** Nurses lacking access to adequate PPE (24.9%, n=163) were more likely to report symptoms of depression (OR 1.96, 95% CI 1.31, 2.94; P=0.001), anxiety (OR 1.64, 95% CI 1.12, 2.40; P=0.01) and post-traumatic stress disorder (OR 1.83, 95% CI 1.22, 2.74; P=0.003). **CONCLUSIONS:** Healthcare organizations should be aware of the magnitude of mental health problems among nurses and vigilant in providing them with adequate PPE as the pandemic continues.

Becker, B., Vaillant, L., Lutz-Guiche, R., et al. (2020). "Covid19, et après ? (Dossier)." *Objectif soins & management*: pp.24-58.

Au plus fort de la crise sanitaire provoquée par la Covid 19, les soignants de toutes fonctions ont fait preuve de qualités exceptionnelles, saluées par toute la population. A contrario des craintes d'épuisement et de fatigue, la crise de la Covid 19 a permis aux professionnels de santé de montrer toutes leurs compétences. Après le pic de la crise, de nombreux écrits offrent une large place à la diffusion de ces expériences, réflexions, propositions.

Chidiebere Okechukwu, E., Tibaldi, L. et La Torre, G. (2020). "The impact of COVID-19 pandemic on mental health of Nurses." *Clin Ter* **171**(5): e399-e400.

COVID-19 pandemic affected the psychological health of nurses. Numerous nurses have been facing mental complications associated with quarantine such as psychological distress and fear. The gravity of COVID-19 pandemic is triggering further mental health challenges among nurses. The continuous stress nurses are facing, could trigger post-traumatic stress symptoms, poor service delivery, suicide ideation and suicide. Assessing and preserving the mental health of nurses and the health care workers in general is necessary for optimal disease control. Psychiatric interventions are needed to attend to the psychological need of nurses treating COVID-19 patients. Such interventions imply using E-learning and video platforms to educate nurses on communication skills, case handling skills and problem-solving tactics to deal with the possible psychological problems that might arise from treating COVID-19 patients.

Clavagnier, I. (2020). "Les étudiants infirmiers au cœur de la crise de la Covid-19." *J Med Internet Res* **69**(263): 43-45.

Student nurses at the heart of the Covid-19 crisis. Many student nurses were involved in dealing with the Covid-19 health crisis. As a consequence, the block release training programme was completely overturned in order to meet the urgent requirements of health and medical-social institutions. Two student nurses from Île-de-France, in their third year of training, share anonymously their experience on the ground during the health crisis. Their experiences, which required polyvalence, adaptability, stress management and autonomy on their part, have considerably enriched their portfolio of competencies.

Duarte, A. P. c. et Sibe, M. c. (2020). "Prendre soin des professionnels de santé : quelles modalités d'accompagnement pour favoriser la qualité de vie au travail." *Actualité Et Dossier En Santé Publique*(110): 51. <https://www.hcsp.fr/explore.cgi/Adsp?clef=1171>

Finalisé en janvier 2020, ce dossier souhaite mettre en lumière l'importance d'un accompagnement favorable à la qualité de vie au travail des professionnels de santé. Entre-temps, la pandémie de la Covid-19 s'est installée, mettant à l'épreuve l'ensemble de la population et de notre système de soins. En soi, la difficulté de l'épidémie n'est peut-être pas tant de gérer le risque (les professionnels y sont préparés et formés), mais davantage d'inventer in vivo un management de l'incertitude liée à un risque inconnu, contraignant à décider malgré des informations contradictoires, parcellaires, fluctuantes. Nous avons eu peur collectivement du chaos.

Liang, Y., Chen, M., Zheng, X., et al. (2020). "Screening for Chinese medical staff mental health by SDS and SAS during the outbreak of COVID-19." *J Psychos om Res* **133**: 110102.

Maben, J. et Bridges, J. (2020). "Covid-19: Supporting nurses' psychological and mental health." *J Clin Nurs* **29**(15-16): 2742.

Sampaio, F., Sequeira, C. et Teixeira, L. (2020). "Nurses' Mental Health During the Covid-19 Outbreak: A Cross-Sectional Study." *J Occup Environ Med* **62**(10): 783-787.

OBJECTIVE: To describe nurses' mental health status during the Covid-19 outbreak and to explore the factors that might accentuate the negative consequences on their mental health. METHODS: We conducted an online survey to evaluate demographic variables, working conditions, family dynamics, and mental health variables in nurses working in healthcare settings, in Portugal, during the Covid-19 outbreak. RESULTS: Portuguese nurses presented higher depression, anxiety and stress levels, when compared to the Portuguese general population, during the outbreak. Overall, nurses who did not consider the quantity and quality of personal protective equipment as adequate presented significantly higher levels of depression, anxiety, and stress. CONCLUSIONS: Our results suggest that nurses' mental health status seems to be particularly affected by the Covid-19 outbreak and that some modifiable elements might accentuate the impacts on their mental health.

Sanghera, J., Pattani, N., Hashmi, Y., et al. (2020). "The impact of SARS-CoV-2 on the mental health of healthcare workers in a hospital setting-A Systematic Review." *J Occup Health* **62**(1): e12175.

OBJECTIVES: The SARS-CoV-2 global pandemic has subjected healthcare workers (HCWs) to high risk of infection through direct workplace exposure, coupled with increased workload and psychological stress. This review aims to determine the impact of SARS-CoV-2 on mental health outcomes of hospital-based HCWs and formulate recommendations for future action. **METHODS:** A systematic review was performed between 31st December 2019 and 17th June 2020 through Ovid Medline and Embase databases (PROSPERO ID CRD42020181204). Studies were included for review if they investigated the impact of SARS-CoV-2 on mental health outcomes of hospital-based HCWs and used validated psychiatric scoring tools. Prevalence of ICD-10 classified psychiatric disorders was the primary outcome measure. **RESULTS:** The initial search returned 436 articles. Forty-four studies were included in final analysis, with a total of 69,499 subjects. Prevalence ranges of six mental health outcomes were identified: depression 13.5%-44.7%; anxiety 12.3%-35.6%; acute stress reaction 5.2%-32.9%; post-traumatic stress disorder 7.4%-37.4%; insomnia 33.8%-36.1%; and occupational burnout 3.1%-43.0%. Direct exposure to SARS-CoV-2 patients was the most common risk factor identified for all mental health outcomes except occupational burnout. Nurses, frontline HCWs, and HCWs with low social support and fewer years of working experience reported the worst outcomes. **CONCLUSION:** The SARS-CoV-2 pandemic has significantly impacted the mental health of HCWs. Frontline staff demonstrate worse mental health outcomes. Hospitals should be staffed to meet service provision requirements and to mitigate the impact on mental health. This can be improved with access to rapid-response psychiatric teams and should be continually monitored throughout the pandemic and beyond its conclusion.

Shaukat, N., Ali, D. M. et Razzak, J. (2020). "Physical and mental health impacts of COVID-19 on healthcare workers: a scoping review." *Int J Emerg Med* **13**(1): 40.

BACKGROUND: Coronavirus disease (COVID-19) pandemic has spread to 198 countries, with approximately 2.4 million confirmed cases and 150,000 deaths globally as of April 18. Frontline healthcare workers (HCWs) face a substantially higher risk of infection and death due to excessive COVID-19 exposure. This review aimed at summarizing the evidence of the physical and mental health impacts of COVID-19 pandemic on health-care workers (HCWs). **METHODS:** We used the Arksey O'Malley framework to conduct a scoping review. A systematic literature search was conducted using two databases: PubMed and Google Scholar. We found 154 studies, and out of which 10 met our criteria. We collected information on the date of publication, first author's country, the title of the article, study design, study population, intervention and outcome, and key findings, and divided all research articles into two domains: physical and mental health impact. **RESULTS:** We reviewed a total of 154 articles from PubMed (126) and Google Scholar (28), of which 58 were found to be duplicate articles and were excluded. Of the remaining 96 articles, 82 were excluded after screening for eligibility, and 4 articles did not have available full texts. Ten full-text articles were reviewed and included in this study. Our findings identified the following risk factors for COVID-19-related health impact: working in a high-risk department, diagnosed family member, inadequate hand hygiene, suboptimal hand hygiene before and after contact with patients, improper PPE use, close contact with patients (≥ 12 times/day), long daily contact hours (≥ 15 h), and unprotected exposure. The most common symptoms identified amongst HCWs were fever (85%), cough (70%), and weakness (70%). Prolonged PPE usage led to cutaneous manifestations and skin damage (97%), with the nasal bridge (83%) most commonly affected site. HCWs experienced high levels of depression, anxiety, insomnia, and distress. Female HCWs and nurses were disproportionately affected. **CONCLUSION:** The frontline healthcare workers are at risk of physical and mental consequences directly as the result of providing care to patients with COVID-19. Even though there are few intervention studies, early data suggest implementation strategies to reduce the chances of infections, shorter shift lengths, and mechanisms for mental health support could reduce the morbidity and mortality amongst HCWs.

Stelnicki, A. M., Carleton, R. N. et Reichert, C. (2020). "Nurses' Mental Health and Well-Being: COVID-19 Impacts." *Can J Nurs Res* **52**(3): 237-239.

The editorial will introduce a special section on nurses' mental health and well-being that will showcase results from a groundbreaking pan-Canadian study of nurses' occupational stress. The article series highlights research efforts toward better supporting nurses' mental health. In this editorial, we discuss the importance of this research in light of the COVID-19 pandemic. We review the current stressors faced by nurses and anticipate how nurses' mental health and well-being will be impacted by COVID-19.

Vizheh, M., Qorbani, M., Arzaghi, S. M., et al. (2020). "The mental health of healthcare workers in the COVID-19 pandemic: A systematic review." *J Diabetes Metab Disord* **19**(2): 1967-1978.

PURPOSE: The novel coronavirus 2019 (COVID-19) is widely spreading all over the world, causing mental health problems for most people. The medical staff is also under considerable psychological pressure. This study aimed to review all research carried out on the mental health status of health care workers (HCWs) to bring policymakers and managers' attention. **METHODS:** A literature search conducted through e-databases, including PubMed, EMBASE, Scopus, and Web of Science (WoS) from December 2019 up to April 12th 2020. All cross-sectional studies published in English which assessed the health workers' psychological well-being during the SARS-CoV-2 pandemic included. Study quality was analyzed using NHLBI Study Quality assessment tools. **RESULTS:** One hundred relevant articles were identified through systematic search; of which eleven studies were eligible for this review. Their quality score was acceptable. The lowest reported prevalence of anxiety, depression, and stress among HCWs was 24.1%, 12.1%, and 29.8%, respectively. In addition, the highest reported values for the aforementioned parameters were 67.55%, 55.89%, and 62.99%, respectively. Nurses, female workers, front-line health care workers, younger medical staff, and workers in areas with higher infection rates reported more severe degrees of all psychological symptoms than other health care workers. Moreover, vicarious traumatization in non-front-line nurses and the general public was higher than that of the front-line nurses. **CONCLUSION:** During SARS-CoV-2 outbreak, the health care workers face aggravated psychological pressure and even mental illness. It would be recommended to the policymakers and managers to adopt the supportive, encouragement & motivational, protective, and training & educational interventions, especially through information and communication platform.

An, W., Zeng, L., Liu, J., et al. (2018). "Mental Health of Nurses Working at a Government-designated Hospital During a MERS-CoV Outbreak: A Cross-sectional Study." *J Nurs Scholarsh* **32**(1): 2-6.

BACKGROUND: During an epidemic of a novel infectious disease, many healthcare workers suffer from mental health problems. **OBJECTIVES:** The aims of this study were to test the following hypotheses: stigma and hardiness exert both direct effects on mental health and also indirect (mediated) effects on mental health through stress in nurses working at a government-designated hospital during a Middle East Respiratory Syndrome coronavirus (MERS-CoV) epidemic. **METHODS:** A total of 187 participants were recruited using a convenience sampling method. The direct and indirect effects related to the study hypotheses were computed using a series of ordinary least-squares regressions and 95% bootstrap confidence intervals with 10,000 bootstrap resamples from the data. **DISCUSSIONS:** The influences of stigma and hardiness on mental health were partially mediated through stress in nurses working at a hospital during a MERS-CoV epidemic. Their mental health was influenced more by direct effects than by indirect effects.

Pour en savoir plus

Consulter la bibliographie de l'irdes : [Les professions paramédicales : sociologie et délégation de soins. 2020/12.](#)