



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

¹ Kawasaki City College of Nursing, Nursing, KAWASAKI, Japan,

² Fujisawa Taxi Co., Ltd., President, FUJISAWA, Japan

Objectives: This study aimed to reveal the details of the four aspects proposed by the Korn Ferry assessment model to develop an evaluation index for assessing the emergency response skills of occupational health nurses (OHNs).

Methods: The study was designed as a qualitative descriptive study employing a group interview technique. Study collaborators were selected by snowball sampling from among OHNs with experience in emergency response at the workplace. A group of five OHNs were interviewed, and data was recorded using a digital voice recorder. **Results:** The extracted traits were the big five personality traits: "openness," "conscientiousness," "extroversion," "agreeableness," and "neuroticism." The extracted drivers were "participation in academic conferences/seminars," "passage of time from clinical experiences," "role models/aspirations," and "news of occupational hazards." The extracted competencies were "determination of life-threatening conditions and emergency care," "prevention of emergencies/preventive activities for containment," and "ethics and professionalism in emergencies," and the extracted experiences were "clinical experiences," "training," and "manuals."

Conclusions: The Korn Ferry assessment model is a framework that visualizes congenital elements (traits and drivers) and acquired elements (competencies and experiences), thereby uncovering latent abilities of subjects. By scrutinizing the results of this study, we aimed to establish a reference for developing an evaluation index for the emergency response skills of OHNs.

436

Perceptions Of Frontline Service Providers On The Accreditation Of Occupational Health Services In South Africa

Karen Michell¹, Laetitia Rispel²

¹ IOSH, Research, Leicester, United Kingdom, ² University of Witwatersrand, School of Public Health, Johannesburg, South Africa

INTRODUCTION: Globalisation and the changing nature of work require the provision of quality occupational health services (OHS) to achieve universal occupational health coverage enunciated in the sustainable development goals. This paper draws on Lipsky's theory of "street level bureaucrats" to explore the perceptions of occupational health nurse practitioners (OHNPs) on the accreditation of OHS for quality service delivery.

METHODS: Between 2014 and 2015, a mixed methods cross-sectional study was conducted among OHNPs in South Africa. A web-based survey among OHNPs included questions on OHS accreditation, while focus group discussions (FGDs) explored their narratives on OHS, accreditation and quality. Stata®14 supported the analysis of quantitative data, while thematic analysis supported the exploration of the qualitative data.

RESULTS: The majority of OHNPs (93.8%) were of the opinion that OHS should be accredited, while 73.6% said it should be a statutory requirement with clear standards that will enhance quality. However, support is conditional on phased implementation, effective governance, a national OHS policy, stakeholder commitment and resource availability. Applying Lipsky's notion of street level bureaucrats to the FGDs suggest that OHNP could either embrace or sabotage policy initiatives.

CONCLUSION: Considering the criticality of quality OHS for all workers, the perceptions of frontline OHNs should be taken into account in the design and implementation of any accreditation system to advance quality universal occupational health coverage.

437

An Interview Survey of the Difficulties Experienced by Occupational Health Nurses in Japan under the COVID-19 Pandemic

Akiko Kawamoto¹, Mikako Arakida², Kiyomi Asahara³, Emiko Konishi⁴, Kiyomi Tomiyama⁵, Wakana Harada¹

¹ St. Luke's International University, Graduate School of Nursing Science, Tokyo, Japan, ² Kawasaki City College of Nursing, Nursing, Kawasaki, Japan, ³ St. Luke's international University, Graduate School of Nursing Science, Tokyo, Japan, ⁴ Kagoshima University, Faculty of Medicine, Kagoshima, Japan, ⁵ Institution/Company *DEPARTMENTSTORE HEALTH INSURANCE ASSOCIATION Department, DEPARTMENT HEALTH, Tokyo, Japan

Introduction: This study aimed to explore the difficulties faced by occupational health nurses at their workplace in Japan under COVID-19.

Materials and Methods: Data were collected by semistructured interviews of 23 occupational health nurses and analyzed using Krippendorff's method. This study was approved by the institutional review board of St. Luke's International University in 2019 (19-A081).

Results and Conclusions: The data comprised two core categories: (1) "Difficulties in shifting from working at the office to working at home under COVID-19" and (2) "Difficulties in performing daily activities as occupational health nurses". Each core category has 7 specific categories for a total of 14. These 14 specific categories had 51 subcategories. Some examples of these 14 specific categories were (1) "Difficulty in supporting workers' health when working from home", (2) "Insufficient information collected by online interview", (3) "Inadequate communication when using online interview", (4) "Dilemma of unequal company support for individuals and workplace-related health support", and (5) "Having few chances to get updated with the latest support systems and knowledge for occupational health nurses". The results revealed the difficulties of occupational health nurses when working from home under COVID-19. Moreover, occupational health nurses have faced ethical issues regarding their workplace activities. These ethical issues are correlated to the above-mentioned difficulties. This suggests the importance of correspondence by both individuals and the organization to address important ethical issues.

438

Support strategies to reduce psychosocial stressors in nursing students through the COVID-19 pandemic and beyond: a mixed-methods study protocol

Leonie Matteau¹, Mahee Gilbert-Ouimet¹, Isabelle Toupin¹, Nicole Ouellet¹, Manon Truchon², Marianne Beaulieu³

¹ Université du Québec à Rimouski, Sciences de la sante, Rimouski, Canada, ² Université Laval, Psychologie, Quebec, Canada, ³ Université Laval, Sciences infirmières, Quebec, Canada

Introduction: Psychological distress (PD) is prevalent among university students, especially women. Nursing students from various countries have shown prevalence of PD from 26.6% to 65.3% during the COVID-19 pandemic. In Canada, most nursing students work during their studies, increasing sources of stress and, in turn, the risk of PD. This study aims to evaluate the associations between

psychosocial stressors from academic studies and PD, school-work-life conflicts (SWLC), and the intention to quit the nursing program (ITQ) among nursing students; and, subsequently, to suggest adapted support strategies reducing psychosocial stressors from nursing studies.

Material and Methods: This study relies on a mixed-method design. First, quantitative data will be collected through a survey completed by 225 nursing students from two nursing schools in Quebec, Canada. Poisson regression model will be used to evaluate whether the stressors increase the prevalence of PD, SWLC, and ITQ. A qualitative phase will involve focus groups with nursing students, teachers, and other nursing school staff to co-construct the support strategies.

Results: First, we will identify psychosocial stressors associated to PD, SWLC, and ITQ. Then, we will elaborate support strategies in response to the problems and needs previously identified.

Conclusion: The findings will provide new insights on actions to reduce psychosocial stressors from academic studies to reduce PD, SWLC and ITQ among nursing students.

439

Transitioning Ipe Curriculums From Occupational Medicine To Occupational Health

Angela Butkovic

SASOHN, Executive Committee 2021, Johannesburg, South Africa

Introduction: Applying core IPE curriculum competencies in Occupational Health for certain postgraduate programs has become more apt now than ever before in developing countries as prompted by the WHO's Framework for Action on IPE and Collaborative Practice (WHO, 2010). In addition, to the momentum of acquiring internationally on-line recognized qualifications in occupational health and/or safety.

Material and Methods: In order to clarify contemporary core competencies required by practitioners in the occupational health fields of medicine, nursing, hygiene, ergonomics, psychotherapy, physical therapy, to address managing total worker health promotion programs in the workplace for the African context, a scoping review using Arksey and O'Malley's framework (2005) for relevant articles from the last 5 years through Google Scholar, Research gate and the SAQA qualifications database, was conducted.

Results & Discussion: From 1680 articles the main themes addressed shared competencies in effective communication strategies, defining the contemporary roles and responsibilities of the disciplines involved, developing structure processes promoting shared decision-making, medico-legal practice, standardizing health assessment tools, case management skills.

Conclusion: This scoping review forms the foundation to conduct phase two, the mixed-method research into gaining support from key stakeholders in such a proposed IPE curriculum.

22. OCCUPATIONAL MEDICINE

440

Using Total Worker Health® Approaches to Reduce Absenteeism and Work-Related Accidents

Luciano Resende Ferreira¹, Laura Cristina Rios Ferreira², Luciano Aurelio Rios Ferreira³, Anthony Resende Ferreira⁴, Cristiano Machado Galhardi¹

¹ Unifae, Occupational Medicine, São João da Boa Vista, Brazil,

² Humanitas School of Medicine, Medicine, Sao Jose dos Campos-sp, Brazil, ³ Wiz, m&A, São Paulo, Brazil, ⁴ PUC, Medicine, Poços de Caldas-MG, Brazil

Introduction: Total Worker Health® (TWH) is defined as policies, programs, and practices that integrate protection from work-related safety and health hazards with the promotion of disease prevention efforts to reach worker's well-being. This study had the objective to verify if the implementation of a program characterized by the integration of health and safety in companies, with the inclusion of the concept of TWH® promoted by an occupational health service have impacted in the management of absenteeism and work-related accidents.

Material and Methods: A retrospective and paired cohort study was performed, in which the impact of the implementation of a Program with TWH® approaches was evaluated in regard to absenteeism management and the number of work-related accidents. The data were analyzed for a period of 9 months from January to September, 2017, before the inclusion TWH® program, compared with the data collected from January to September 2018, after the implementation of the TWH® program.

Results: The results showed a 39% reduction in the number of absenteeism in 2018 (absenteeism index=1,1) compared to the same period in 2017 (absenteeism index=1.8). The data revealed a reduction of the total numbers of work-related accidents at 50%, and of the days of absence from work-related accidents at 81%, after the implementation of the TWH® program.

Conclusions: It was observed that, once the occupational health and safety sectors were approached and integrated with the application of the TWH® concepts, it was possible to reduce absenteeism and the number of work-related accidents.

441

Importance of reporting occupational injuries: a four year review of hospital based injury data

Moazzam Zaidi, Marwan Behisi

Johns Hopkins Aramco Healthcare, Occupational Health & Safety, Dammam, Saudi Arabia

Background: Reporting of occupational injuries, accidents and near misses are the corner stone to make any workplace safer. Heinrich accident pyramid illustrates the importance of reporting and safe behavior. The best value of such a reporting system is in organizations which believe in a safety culture.

Aims: To encourage staff members to properly report incidents, accidents and injuries. Review of the last four-years of occupational injuries were analyzed and reported.

Methods: A retrospective review of all accidents and injuries reported from 2017 to 2020 was performed. Each injury was reviewed by the principal investigator. The data was then de-identified; notes were then reassessed by an independent reviewer. The de-identified data was analyzed on SPSS to provide statistical analysis.

Results: There were 171 occupational injuries reported during this period. More than 50% of the injuries were related to blood and body fluid exposure (BBFE); further analysis of the 107 BBFE identified needle stick injuries to be the most frequently reported occupational injury. The second most frequently reported cause of occupational injuries were falls, trips and slips followed by crush or impact injuries. **Conclusion:** The review of occupational injuries identified blood and body fluid exposure is to be the most common injury. The hospital reported lower number of occupational injuries