Occupational epidemiology in unorganised sectors: agriculture, construction, service sectors

O-202 A CROSS SECTIONAL STUDY TO ASSESS THE OCCUPATIONAL HEALTH HAZARDS AMONG FISHERWOMEN IN A METROPOLITAN CITY

Bhakti Maruti Kirdat, Sangeeta Pandit. Ergonomics Lab, Design Discipline Indian Institute of Information Technology Design and Manufacturing Jabalpur, India

Introduction Fish trade is a traditional occupation that has been a livelihood for thousands in India with the majority of fish vendors being women. Security in all aspects is required for hygienic handling of fish, for the health and well-being of vendors, for consumer health and for enabling women to engage in such occupation in a dignified manner. Research regarding the working conditions and health status of fishing communities particularly in developing countries is scarce.

Materials and Methods It is a community based Observational Cross-Sectional study. Eight fish markets comprising of women fish vendors working for > 1 year (age >30 years) in a metropolitan city were selected. Cluster sampling method was used. Sample size is 225. Study period was 2 years. An Interview Schedule and Physical instruments were used. Chi-square test was used.

Results Majority of study subjects had Diabetes mellitus (24%) and were overweight (54.7%). 28.9% had addiction to smokeless tobacco. 55.1% of participants had musculoskeletal pain of which low back pain 69 (30.7%) was most common. There was a strong statistically significant association between mode of carrying boxes and Musculoskeletal Pain status, \( \chi^2(1) = 56.35, p < 0.001 \) and Cramer’s \( V = 0.5, p<0.001 \). There was a highly strong association between duration of occupation and Musculoskeletal pain status, \( \chi^2(3) = 89.67, p < 0.001 \) and Cramer’s \( V = 0.631, p<0.001 \). 90.2% participants got injured of which majority had incisional wounds 124 (61.1%). 55.1% participants suffered from skin infections of which majority 28 (12.4%) had itching and redness of hands and legs. There was a statistically significant association between duration of occupation and skin infections, \( \chi^2(3) = 140.53, p < 0.001 \). There was a statistically significant association between use of gloves (63.2% participants) and skin infections, \( \chi^2(1) = 20.395, p < 0.001 \).

Conclusions Various measures including ergonomic solutions that women Fish vendors can take to reduce these health hazards needs to be addressed.

Intervention studies

O-203 IDENTIFYING THE NEED FOR GAMIFIED HABIT-BUILDING MOBILE APPLICATION FOR PCOS MANAGEMENT IN FEMALE STUDENTS IN JABALPUR, INDIA

Bhakti Maruti Kirdat, Sangeeta Pandit. Ergonomics Lab, Design Discipline Indian Institute of Information Technology Design and Manufacturing Jabalpur, India

Introduction Polycystic ovary syndrome (PCOS) is a common endocrine disorder predominantly affecting women of reproductive age. India has witnessed a 30% raise in PCOS cases in the last couple of years. Contrary to surgical and pharmaceutical treatments, lifestyle modifications for women with PCOS are a more affordable first line of treatment, albeit maintaining positive behavioural changes can be challenging. Some studies support that gamification can have a positive impact on health-related behaviours. This paper aims to determine the need for gamified habit-building mobile application for PCOS management in girl students.

Methods 108 students of ages 18 to 32 years were considered for the 1st phase of the study. A questionnaire was prepared to conduct a non-experimental survey to gain knowledge about the prevalence of PCOS. In phase two of the study, 22 PCOS-positive students were selected from the cohort to understand their PCOS symptoms, management methods and use of mobile applications for well-being through semi-structured interviews.

Result Out of 108 participants, 26 students (24.07%) declared themselves medically diagnosed with PCOS. 22 subjects were interviewed for the next phase. Almost all (95.45%) mentioned using multiple mobile applications to manage their health conditions. 17 subjects (77.27%) acknowledged spending more than 30 mins a day playing digital games for entertainment. 20 interviewees (91%) agreed that elements of gamification like rewards, theme and social influence, might be useful for staying motivated to follow a healthy routine. All 20 subjects (91%) admitted that they would use a gamified application if available, for building and maintaining healthy habits to manage their PCOS condition.

Conclusion The study concludes that students with PCOS would use a PCOS-specific gamified mobile application to stay motivated to build and maintain healthy habits to manage PCOS.

COVID 19

O-204 INTENSIVE CARE UNIT PHYSICIANS’ CHALLENGES ON OCCUPATIONAL SAFETY AND HEALTH DURING THE COVID-19 PANDEMIC: A SCOPING REVIEW

1Abdul Aziz Harith, 1Rob Griffiths, 1Julia Myers, 3Maria Stubbe, 4Donna Tietjens. 1Occupational and Aviation Medicine Department, University of Otago, New Zealand; 2Occupational Health Research Centre, Institute for Public Health, National Institutes of Health, Malaysia; 3School of Medicine and Health Science, University of Otago, New Zealand; 4School of Medicine and Health Science, University of Otago, New Zealand

Introduction Demand exceeded capacity during COVID ‘sorges’ in certain intensive care units around the world, resulting in avoidable deaths, workload pressures on staff, longer and more intensive care, and an increased risk of staff infection during intensive interventions. A limited number of studies examined intensive care physicians’ experiences and perceptions during the COVID-19 pandemic. This review summarises the available published articles related to the challenges faced by ICU consultants during the COVID-19 pandemic from an occupational safety and health perspective.

Material and Methods The PRISMA-ScR guidelines were applied to four online databases, including Medline, Scopus,