



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.

neurosis. The data show that levels of anxiety, depression, and stress-related symptoms increased during the lockdown period, especially in women, and that this affected the subjects' psychosocial functioning.

### 332

#### **Remote work during Covid-19 pandemic: The prevalence of musculoskeletal pain in Latvian employees**

Darja Kaluznaja<sup>1</sup>, Jelena Reste<sup>2</sup>, Ivars Vanadzins<sup>2</sup>

<sup>1</sup> Riga Stradiņš University, Department of Occupational and Environmental Medicine, Riga, Latvia, <sup>2</sup> Riga Stradiņš University, Institute of Occupational Safety and Environmental Health, Riga, Latvia

**Introduction.** Covid-19 restrictions in the spring of 2020 brought huge changes in the work environment and increased the ergonomic and psychosocial factors' importance for remote and on-site workers. This study aimed to analyse the prevalence of musculoskeletal pain in Latvian employees, focusing on a change in the work environment because of remote work.

**Material and Methods.** The results of an online structured survey conducted in October of 2020 among Latvian employees (n=1037) from the State Research Programme "Covid-19 mitigation" project were analysed. The presence of musculoskeletal pain in at least one body region (lower back, neck, hands, legs) during previous year was an outcome of the research. The programme IBM SPSS 26 was used for descriptive data analysis.

**Results.** A higher prevalence of musculoskeletal pain was observed among women (35.0 vs 22.8%); employees who started to work remotely during Covid-19 (37.1 vs 26.4%), and employees with working hours >10 per day (48.6 vs 32.2%). One-fifth (19.2%) of employees felt anxiety during remote work associated with new work and living environment, and almost half of them also experienced musculoskeletal pain. A higher prevalence of pain was among workers who did not change working hours despite the necessity and ignored work and family care balance during the remote work period. Also, half (49.7%) of employees whose remote workplace wasn't convenient and suitable for work with a computer experienced pain.

**Conclusions.** Ergonomic and work organisation failures in remote work associated with higher musculoskeletal pain prevalence in employees than demographic factors.

### 333

#### **Remote workers' perceived health during the COVID-19 pandemic: a mixed methods study of influencing factors**

Luke Anthony Fiorini

University of Malta, Centre for Labour Studies, Msida, Malta

**Introduction:** For many workers, the COVID-19 pandemic resulted in an unexpected overnight switch to remote working. Initial studies conducted during the pandemic indicated that remote workers had poorer health levels than those that remained within their workplaces. Few studies have explored the reasons for this. The current study aimed to determine if workers who had the facility to work remotely during the first year of the pandemic had

experienced a change in their perceived health levels and their reasons for this.

**Material and Methods:** An online questionnaire that included both open and closed-ended questions was distributed to the workers of 15 organisations within the IT and communications sector in Malta (N = 459). Qualitative data were analysed via Thematic Analysis.

**Results:** 44% reported that their health had not changed during the first year of the pandemic when compared to the previous year, 33% felt their health had regressed, whilst 23% felt it had got better. In terms of those who reported a change, the reasons for this were linked to five themes: General determinants of health, such as physical activity and nutrition; the development of diseases and disorders, including common mental health disorders; work-related determinants of health, such as social contact and the working environment; pandemic-specific factors, including COVID-19 restrictions; and personal factors, such as caring for children.

**Conclusions:** Remote workers' health was influenced by a multitude of factors that included those related to work, health behaviours, the situation at home and the wider social environment.

### 334

#### **The Relationship Between Occupational Safety and Health and Occupational Health in the fight against COVID-19 in Schools: The case of Teachers in Botswana**

Neo Kenosi

Ministry of basic Education, secondary, Gaborone, Botswana, Botswana

**Introduction:** Botswana has 828 schools with 30 000 teachers. When COVID -19 broke out schools were ill-prepared to deal with the infections. This paper examines the relationship between Occupational Safety and Health and Occupational Health in the fight against COVID-19 and the impact it has had on teachers. Occupational Safety and Health(OSH) and Occupational Health(OH) are critical factors in ensuring the safety and health of employees and in reducing the risks of contracting COVID-19 by teachers in schools. The fight against COVID-19 in schools has been a major challenge in Botswana due to inadequate OSH instruments that can be used in Occupational Health to provide services for teachers. A survey that randomly sampled 10% of urban and rural schools from August 2021 to January 2022.

**Methods:**

1. Observational study based on a 10% sample of schools in urban and rural areas.
2. Examination of official COVID-19 statistics compiled during the pandemic
3. Assess the strength and weakness of the available legislation (the latest version of Factories Act enacted in 1973).

**Results:** A good number of teachers in Botswana contracted COVID-19 and many more were affected through the loss of life. The study is expected to yield the following results:

- Whether sampled schools were properly designed ( the existence of OSHMS) Hierarchy of controls, Risk Management Plans and adherence to health protocols.
- increased number of infected teachers.