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noticed a somewhat lower SRH compared to their employed counterpart. Thereby, participants noticed both positive as well as negative aspects the pandemic has caused in their personal life. Besides fear, loneliness and uncertainty, they also mentioned calmness, more energy and less stress.

Conclusions: During the COVID pandemic in the Netherlands, perceived health status differed between subgroups of employment status. Our preliminary results indicate that further analyses should take into account the diversity within disability groups. Furthermore, a more comprehensive examination is needed to investigate (health) needs.

714

Evaluation of risk of occupational disease biotransmission of SARS-COV2 in wastewater treatment plant workers

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Introduction: This review explores the level of risk of SARS-COV-2 (severe acute respiratory syndrome coronavirus 2) transmission in wastewater to wastewater treatment plant workers in an occupational setting. SARS-COV-2 is present in sewage as it can be shed in the faeces of individuals with COVID-19. Multiple potential risk factors for SARS-COV-2 transmission from wastewater to sewage workers in an occupational setting have been postulated based on previous studies. These factors include wastewater aerosolization at the pumping stage, coronavirus lipid envelopes and viability in sewage depending on environmental conditions.

Materials and methods: This study reviewed literature from multiple global databases to establish the level of documented risk of transmission of SARS-COV-2 to wastewater workers in an occupational setting.

Results: No published case report of occupational transmission of SARS-COV-2 via wastewater to wastewater treatment plant workers was found. International studies and surveillance of SARS-COV-2 in wastewater have found that virus quantification in wastewater is not indicative of infectivity.

Conclusion: There is currently no epidemiological evidence published to demonstrate a clear link between the occupational risk of SARS-COV-2 infection and exposure to wastewater sludge or biosolids. Further research is warranted in this novel area for more direct measurement and risk quantification of multiple aspects including virus persistence in wastewater, level of active virus transmission by aerosolization in wastewater facilities and occupational SARS-COV-2 case rate in wastewater treatment plant workers.

715

Shared measures to contain the SARS-COV-2 wave: a regional experience in Italy to counter the first phase of the COVID-19 pandemic in elderly care facilities

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Introduction: The COVID-19 pandemic has gone through several phases, worldwide. Italy, before all the other countries, was characterized by a first serious phase, especially in residential healthcare facilities, which host fragile and vulnerable patients. This study aims to evaluate the response capacity of these structures to the SARS-COV-2 emergency, in Sulmona, Italy, a small reality in the Italian province with a higher life expectancy.

Material and Methods: From March to December 2020, we analyzed the healthcare facilities management models, through drafted checklists oriented to 3 macro-items: work organization, risk management, and occupational health and safety, and in a second phase we checked these measures. We verified the epidemic trend through the direct screening for SARS-COV-2 in operators and patients.

Results: 18 facilities (100%) responded by filling in the checklist; adherence to COVID-19 emergency measures was analyzed. The average time to return the questionnaires was 5.11 days. 478 patients and 238 operators were screened for SARS-COV-2. All tested negative for SARS-COV-2; On that occasion, the described measures in the checklists were verified. No epidemic outbreaks were recorded in the wards, but a facility was affected by a cluster among the kitchen operators.

Conclusions: the examined facilities showed a good response to the regulatory constraints for the SARS-COV-2 emergency. This study shows the importance of a prevention management model, shared with the control authorities, also in the case of other future pandemics, for the containment of viral spread within healthcare facilities.

716

Working from home or commuting: mental health and its associated psychosocial factors at work from 9-month prospective study in the COVID-19 pandemic

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Introduction: This study aimed: 1) to compare the mental health of employees working from home (WFH) with that of commuters and 2) to investigate the association between psychosocial factors at work and mental health among employees WFH during the pandemic.

Methods: The data were retrieved from the employee cohort study (E-COCO-J) from March 2020 (T1) to June 2021 (T7). Participants analyzed in this study were 1) currently working, 2) non-healthcare workers, and 3) employees who answered that their company encouraged employees to work from home. Psychological distress and psychosocial factors at work (i.e., job quantity, job control, supervisor support, and co-worker support) were measured by the Brief Job Stress Questionnaire (BJSQ). The difference in psychological distress between the groups (WFH vs. commuting) at each time point (T2–T7) was tested with a t-test. A mixed-model repeated measures ANOVA was conducted as indicators of the group×time interactions for psychological distress. The group were 1) WFH vs. commuting and 2) high or low levels of psychosocial factors at work in WFH.

Results and Conclusions: WFH (n=285) and commuting (n=201) were included. WFH significantly showed lower psychological distress than commuting at five of six surveys (T3-T7). 1) The same associations were found in time×group interactions at T3 and T4, after adjusting covariates. 2) The main effect of low co-worker support was significantly associated with high distress in WFH, after adjusting covariates, while interaction was not significant. Co-worker support is an important factor for WFH to keep mental health during the pandemic.

717

Are mental health problems in prospective healthcare students increasing? A retrospective analysis of the prevalence of mental health problems amongst university applicants to healthcare courses

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Objective: This study was conducted at an occupational health unit in a UK University. The primary aims were to establish whether the prevalence and complexity of mental health conditions amongst prospective healthcare students is increasing. The secondary aim was to consider the implications to occupational health resourcing.

Methods: Data was collected retrospectively for the years 2017–2020 across four courses, Midwifery, Adult, Mental Health and Child Nursing. Students declaring mental health conditions were categorised by complexity and the need for occupational physician input to determine fitness for studies. Data on occupational health referrals relating to mental health concerns during studies was also gathered.

Results: 2045 students were included of which 644 declared a mental health condition. An increasing prevalence of mental health conditions was seen from 24.3% in 2017 to 37.7% in 2020 (p=0.01). Similarly, the proportion of students with high complexity conditions increased from 3.8% in 2017 to 13.6% in 2020 (p=0.03). The most frequently declared mental health conditions were anxiety and depression (74.8%), eating disorders (7.0%) and post-natal depression (5.9%). The prevalence of eating disorders was noted to have doubled between 2017 to 2020.

Conclusion: This study has demonstrated an increasing prevalence and complexity of mental health conditions. There is a requirement for increased occupational health provision to ensure prospective healthcare students are adequately assessed prior to commencing studies. Further research would be valuable to confirm the results of this single centre study.

718

“We are our own worst enemy”: a qualitative exploration of work-related stress in the construction industry

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Introduction: Around 400,000 working days per year are lost in the construction industry due to stress, depression or anxiety, but a large proportion of the industry – those primarily not based “on site” – are not included in these statistics. We explored how stress

was experienced and managed by construction professionals and its perceived impact on health.

Materials and Methods: We interviewed 32 construction professionals in a British construction company, with varying levels of seniority and years in the industry.

Results: Stress was viewed an inevitable and increasing part of the construction industry. Participants talked about a culture of stress and overwork but often felt unable to challenge. Senior management acknowledged stress was a problem. Company-wide initiatives had been implemented to address stress levels but were criticised for ignoring underlying issues. Informal means of managing stress were identified, such as careful consideration of team dynamics which allowed employees to form close bonds and using ‘banter’ and comradery to relieve stress. However, the persistence of a macho male image meant some participants were reluctant to talk about their feelings at work. Participants described coping strategies (exercise), but these were hard to prioritise in challenging times.

Conclusions: Industry pressures and competitive practices undermine efforts to improve staff wellbeing. Action must be taken at senior levels to address this conflict, while building on existing informal mechanisms of support and stress relief.

719

Process evaluation of a Citizen Science approach in a Worksite Health Promotion Program to improve health in an occupational setting

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Active involvement of workers in the implementation of Worksite Health Promotion Programs (WHP) is important to increase the support, compliance and potential effect of the program. However, most programs in an occupational setting lack the continuing involvement of workers like a citizen science approach. This study aims to evaluate the process of a Citizen Science approach in which the target group of workers have been actively involved in the design of the WHP. The study took place in a terminal and a construction company. Mixed methods using questionnaires and interviews were applied to evaluate the process of the Citizen Science approach. The Nielsen and Randall framework was used to cover process indicators on the intervention, context and mental models. The majority of employees felt actively involved, resulting in overall positive experience of the intervention and approach. Suggestions regarding the communication and tailoring were addressed to improve reach, satisfaction and readiness for change. The elements culture and events appeared to have a hindering effect on the facilitation and implementation of the intended intervention, such as a conservative attitude towards lifestyle change and the covid-19 outbreak. Overall, the Citizen Science approach and the resulting intervention was well received by the employees. Besides the room for improvement of reach, communication and readiness to change, the company’s culture and events appeared to play a vital role in the appeal, satisfaction and participation.