such as balazone, since 1997, and the announcement of the ban on 30 pesticides (mevinone, etc.) and 87 pesticides (dibenzoate, etc.) from 2013 to 2019.

Conclusions The intervention effects of major agricultural reforms and pesticide source control bans are actually reflected in the age-standardized incidence of pesticide poisoning. It also supports the view that the ban on extremely toxic organophosphorus pesticides in the past was indeed effective in the control of organic phosphorus pesticide poisoning among farmers.

Carcinogens/Cancer

THE BURDEN OF PANCREATIC CANCER ASSOCIATED WITH OCCUPATIONAL EXPOSURE TO CHEMICAL AGENTS A HOSPITAL-BASED STUDY IN TAIWAN

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Introduction Pancreatic cancer is one of the most aggressive cancers, and currently, there is no effective treatment. Addressing the contribution of occupational risk factors to pancreatic cancer can help eliminate the disease burden. This study identified the proportion of pancreatic cancer in different occupational exposures, including job titles and chemical exposures.

Material and Methods We recruited pancreatic cancer patients in a medical center in Taiwan from July 2020 to October 2022. Through face-to-face interviews, we collected information about job titles and historical exposure to chemical substances among pancreatic cancer patients.

Results A total of 100 patients (59 men and 41 women) were recruited at a mean age of 65. The most common occupation was farmers (11%), followed by metal processing workers (6%) and carpenters (5%). Farmers reported frequent exposures to pesticides. Metal processing workers reported frequent exposures to metalworking fluids, rust, degreasers, and emulsifiers. In addition, 16% of patients reported volatile organic compounds in diverse industries, such as carpentry, salons, textile, and printing.

Conclusion Farmers with pesticide exposure may contribute to the largest proportion. Occupational exposure to metal processing chemicals and diverse types of volatile organic compounds may play an important role in developing pancreatic cancer.

Return to work/Work capability assessment

COVID-19, LONG-COVID AND RETURN-TO-WORK A QUESTIONNAIRE TO INVESTIGATE THE EXPERIENCE OF THE OCCUPATIONAL PHYSICIANS FROM AN ITALIAN REGION

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Introduction The issues related to return-to-work (RTW) after COVID-19, and the impact of long-COVID on workers’ health engaged in different occupations are far to be fully acknowledged. Occupational Physicians (OPs) represent an important and competent source for the evaluation of these issues in workplaces, scant considered in research up now.

Conclusions The questionnaire involves three sections.

The first with general information on the OPs activity (industrial sector and types of companies followed, main occupational hazards, health surveillance programs carried out). The second section is about long-COVID, defined according to the World Health Organization and the U.S. Centers for Disease Control and Prevention. A list of 22 symptoms based on a systematic search in MedLine has been developed: asthenia; air hunger; chest tightness; memory/concentration problems; mental confusion; joint/muscle pain; sleep disorders; heart palpitations; dizziness; tingling/dyesthesia; gastrointestinal problems; depression and/or anxiety; tinnitus; inappetence; low-grade fever; high-grade fever; cough; headache; sore throat; changes in smell/taste; skin rashes; other symptoms (to be specified). The main characteristics of the workers with long-COVID (age, gender, concomitant diseases, vaccination, smoking habit, body weight and previous infections etc.) and the frequency of the long-COVID symptoms are collected. The last section investigates RTW issues, to quantify the impact of the phenomenon in terms of workers involved, main characteristics of subjects with RTW problems, and implications for their work-ability.

Conclusions Using the OPs direct experience as source of information, the study is aimed to develop new knowledge on the long-term impacts of the SARS-CoV-2 pandemic on workers’ health, specifically considering RTW issues and the occurrence of long-COVID symptoms.

COVID 19

LONGITUDINAL COHORT STUDY TO ASSESS THE LONG-TERM TRAJECTORY OF HEALTHCARE WORKERS’ MENTAL HEALTH DURING COVID-19 PANDEMIC

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Introduction Early evidence following COVID-19 pandemic onset showed substantial impact on Healthcare Workers’ (HCWs) mental health. Most research relies on cross-sectional data collected during the pandemic early stages and longitudinal studies are mainly focused on its first year; more recent mental health data on HCWs are not yet available. The aim of this study is to assess the long-term trajectory of HCWs’ psychological symptoms and the associated risk factors.
EFFECTS OF WITHHOLDING TREATMENT ON MENTAL HEALTH AND EMPLOYMENT CONSEQUENCES

Materials and Methods A longitudinal cohort study was carried out between July 2020 and July 2022 in a large Italian hospital. At T1 (July 2020-July 2021), 990 HCWs took part in the study. For each subject, we administered a set of scales General Health Questionnaire (GHQ-12), Impact of Event Scale (IES-R), General Anxiety Disorder (GAD-7). The same set was re-administered at T2 (July 2021-July 2022). We performed McNemar’s test to measure potential changes in symptoms trajectories in time and Generalized Estimating Equation (GEE) to evaluate potential risk factors associated with scores above the cut-off.

Results Three hundred and ten subjects participated to the follow-up evaluation. At T2, percentages of overpassing relevant cut-offs were significantly lower (p<0.001) than T1 for all scales (23% vs 48% for GHQ-12; 11% vs 25% for IES-R; 15% vs 23% for GAD-7). Being a nurse (IES-R OR=3.21, 95%CI 1.92–9.23; GAD-7 OR=2.34, 95%CI 1.25–4.37) or a health assistant (IES-R OR=4.43, 95%CI 1.12–13.6) and having had an infected family member (GHQ-12 OR=1.88, 95% CI 1.10–3.49) resulted as risk factors for psychological distress. Differently from T1, gender and working in COVID-19 area did not show significant associations with psychological symptoms.

Conclusions In the second year of the pandemic, mental health among HCWs improved compared to the previous year and risk factors for psychological distress were slightly different. Longitudinal studies may help occupational health and safety professionals to address various levels of prevention.

Results Of the 1453 participants, 54.2% reported withholding treatment due to fear of exposure (4.3%), as directed by their service (76.5%) or both (19.2%). Participants who withheld treatment reported higher rates of PTSD (M=2.6, p <.01) and depression (M=8.2, p < .001) symptoms than those that did not withhold treatments (MPTSD=2.3; Md depression=6.4). Reason for withholding treatment and PTSD symptom severity were associated (p<.01). Paramedics who withheld treatment due to fear of exposure were more likely to report probable PTSD symptoms (23.5%) than those who withheld treatments as directed by their service (8.7%) or both (12.2%). Depression symptom severity did not differ by reasons for withholding treatment.

Conclusions Withholding treatment is potentially traumatic and may influence the development of depression and PTSD symptoms. Withholding due to fear of exposure rather than being directed to increased PTSD symptoms. Further research will investigate the mental health impact of withholding treatment and reported reasons for withholding over time.

Bullying/Stress/Violence

P-152 MENTAL HEALTH AND EMPLOYMENT CONSEQUENCES AMONG INFORMAL CAREGIVERS AT WORK A DANISH NATIONALWIDE REGISTER-STUDY

Introduction Frequencies of mental health conditions are increasing among children and adolescents. Providing long-term informal care for family members has been associated with detrimental stress-related outcomes. This study examines health and job impacts for working caregivers, who have children with mental disorders.

Material and Methods This Danish nationwide register-study is part of the project ‘Informal caregivers at work’ (www.pppjob.dk), phase II, and examines health and job impacts for primary caregivers to children with a mental disorder in the period from 2000 to 2005. We will assess these possible longitudinal associations with follow-up up to 10 years after their child’s incident mental disorder. The exposure group (i.e., primary caregivers to children with a mental disorder) will be matched to a similar reference group (primary caregivers to children without a mental disorder) established from the background working population. We will use data from national and administrative registers merged with psychosocial job-exposure matrices (www.doc-x.dk) to evaluate the mitigating role of specific psychosocial factors on the associations between information caregiving and negative outcomes, including if specific occupational groups carry particular risk. The present study will be conducted between 2023–2024. Communication with target-population representatives and stakeholders