

461

### **Identifying social aspects in real world data to support health outcomes**

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Social aspects have proved to be relevant to health outcomes, especially in OSH settings. However, there's a poor recording of social aspects in electronic health or occupational medicine records, as well as a lack of techniques to retrieve, link and analyse these databases with other sources of knowledge or evidence. This is particularly true when these data are heterogeneous, disperse and of high volume. This presentation introduces an approach to identify social aspects in health data by: (1) mining published evidence from the literature to build a computational knowledge graph of health and social factor associations, and (2) analysing how those associations may be found in claims and medical records or other sources. This work demonstrates how the proposed approach to mine and combine information from different sources could be used to generate hypotheses and inform further research on social aspects in a data-driven manner.

462

### **Occupational Health As a Tool to Improve Workers' Health. Experience Report in Colorectal Cancer Screening in the Approach of 12,233 Professionals in the Largest Hospital Complex in Latin America**

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In Brazil there are 40,000 cases of bowel cancer, with a mortality from colorectal cancer (CCR) of 18,000 people / year. CCR is one of the most common neoplasms in the world. It is most common from 50 yo. The patients present with tumors at an advanced or incurable stage. Early detection optimizes treatment. Preventive measures associated with a periodic occupational examination of the worker can expand this early diagnosis. Aim: to describe the process of carrying out preventive exams for CCR during periodical occupational medical examination (EPO) in health professionals. Descriptive study about protocol usage, adherence, and key outcomes. During the EPO, questionnaires were applied to workers at the largest hospital complex in SP, with 20,000 people, and kits were used to collect stool test samples, with a view to investigating occult blood through the fecal immunochemistry test FIT. Population  $\geq$  50 yo. Period: March to August 2021. The positive results, were referred for colonoscopy exams and specific procedures. Results: EPO were carried out in 5 institutes with a population of 12,233 workers. 4656 (38%) were 50 yo. Of these, 1754 (38%) agreed to take the exams and 1123 (64%) of those who accepted delivered the exams. 100 (8.9%) had positive results and were referred for follow-up. Conclusion:

Through a simple, non-invasive examination performed during EPO, it was possible to identify 100 workers who needed specialized treatment. The screening techniques aim to reduce the morbidity and mortality of an analyzed population. Using these techniques during EPO contribute to an increase in early diagnosis.

463

### **Burnout And Professional Fulfillment Among Brazilian Occupational Physicians**

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Introduction: Burnout is an important problem that impairs workers' health related to chronic exposure to occupational stressors. This study aims to analyze factors associated to burnout and professional fulfillment among Brazilian physicians enrolled in occupational services.

Material and Methods: A national longitudinal study is being carried out since 2020. Baseline information was obtained between October-December/2020. Participants were 436 physicians who answered an electronic questionnaire about sociodemographic characteristics, occupational aspects, psychological symptoms, and the Professional Fulfillment Index. Multiple logistic regressions were built to analyze factors associated to outcomes.

Results: Most participants were female (57.8%), mean age 49.6 years (sd +13.8), graduated for ten or more years (59.2%), weekly working hours equal or up 40 hours (53.0%). High burnout was reported by 41.5% and was associated to graduation less than 10 years, training in occupational medicine residence, weekly working hours equal or up to 40 hours, and psychological symptoms (depression, anxiety, and stress). Low professional fulfillment was reported by 70.0% and was associated to graduation less than 10 years, working in management tasks, depressive or anxiety symptoms.

Conclusions: Mapping associated factors to burnout and professional fulfillment among physicians can help in formatting action for health promotion and disease prevention, since the occupational medical professionals are part of the comprehensive workers' healthcare system.

464

### **Mental Health status of Garment Industry employees in South India**

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