

or Relative Risks). Another relevant problem is the presence of various confounding factors, e.g. occupational exposure to physical or chemical carcinogens possibly occurring in several workplaces, and others, potentially affecting the overall results. **Conclusions** The completion of studies collection, and data extraction and quality assessment of the papers including Risk of Bias analysis according to the protocol registered in PROSPERO, are currently ongoing.

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THE MENTAL HEALTH OF CHILEAN TEACHERS IN TIMES OF FORCED TELEWORK: HOW MANY, WHO AND WHY ARE THEY IN WORSE HEALTH?

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Introduction The impact of the COVID-19 pandemic on education resulted in school closures and the forced implementation of virtual teaching and teleworking. This situation together with the diversity of social and economic contexts in schools, has emphasized inequality in access to quality education and increased stress and anxiety among teachers.

Objectives This study aims to explore the mental health of teachers forced to telework because of COVID-19 and analyze its relationship with sociodemographic, teacher-related and working conditions.

Methods The sample was 278 Chilean classroom teachers who teleworked more than 50% during the 2020 academic year. The dependent variable was mental health measured through the General Health Questionnaire (GHQ-12). The independent variables were sociodemographic, teacher-related and work conditions. The internal structure of the mental health construct was evaluated using the Rasch model. Crude (cOR) and adjusted odds ratios (aOR) were estimated using logistic regression models. The analyzes were stratified by years of teaching experience and sex.

Results A high prevalence of poor mental health was found in teachers (58%). Working in a private-subsidized school (aOR = 2.89; 95% CI: 1.16 - 7.22), working two or more unpaid overtime hours (aOR = 2.25; 95% CI: 1.11 - 4.59) and having sickness absence (aOR = 3.82; 95% CI: 1.53 - 9.58) were associated with poor mental health. Working 35 hours or more weekly among less experienced teachers (6–10 years: aOR = 0.07; 95% CI: 0.01 - 0.51) and being a tutor teacher among women (aOR = 0.48; 95% CI: 0.23 - 1.0) had a protective effect on mental health.

Conclusion This study contributes to the recognition of a high prevalence of poor mental health among Chilean teachers and its associated contextual and labour factors. Need for actions to improve the working conditions of teachers who telework are guaranteed to improve their mental health.

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A DESCRIPTIVE ANALYSIS OF WORKSITE WELLNESS PROGRAM PARTICIPANTS IN A US DEPARTMENT OF ENERGY NATIONAL LABORATORY, 2013 TO 2019

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Introduction Since most working Americans spend one third of their day at a worksite, worksite wellness programs (WWP) provide an avenue for promotion of healthy lifestyles and may reduce health risks.

Objective The purpose of this study is to describe the health trends in the WWP and identify differences between WWP participants and non-WWP workers.

Methods Health data collected from WWP participants at a US Department of Energy National Laboratory was compared to other site personnel who visited Occupational Health services during program years 2013 to 2019. Data were analyzed continuously and categorically, and analyses were conducted in SAS and R.

Results The number of participants in the WWP varied each year (range: 1,463–2,556), with participation slightly declining in later years. Overall, the percentage of those with normal blood pressure declined from 44.7% in 2013 to 29.9% in 2019, while those with a normal total cholesterol increased from 58% in 2013 to 67.2% in 2019. Both males and females in WWP saw changes in waist circumference, blood pressure, and pulse across the program years. Trends in blood pressure showed a decline in normal readings, but both waist circumference and pulse increased the percentage of normal readings. When comparing WWP participants to non-participants, WWP generally had better health values than non-participants in heart rate and blood pressure. In most years, BMI remained the similar between the two groups; however, WWP participants had significantly lower BMIs in 2013 and 2015.

Conclusion The results of the study show that biometric values change over time for WWP participants. Overall, the WWP participants had better biometric values than non-participants. However, more research is needed to determine if this difference is the result of the WWP, or if the volunteerism of WWP participants represents a behavioral difference that may influence their willingness to improve their health.

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DETERMINANTS OF MUSCULOSKELETAL DISORDERS OF THE UPPER LIMBS AMONG MILITARY PERSONNEL IN TUNISIA.

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Introduction Musculoskeletal disorders (MSDs) are the first medical reason for work stoppage among military personnel and are one of the main reasons for dismissal from army service. Prevalence of MSDs, in particular those of the upper limbs (UL-MSDs), among military officers, is insufficiently known, as well as their risk factors, given the complexity of the military service.

Objective To assess the prevalence and the determinants of UL-MSDs in Tunisian army officers.

Methods This is a cross-sectional study among army officers, based on a questionnaire with several items: socio-demographic, occupational characteristics, and psycho-social constraints at work through the Karasek standardized questionnaire. The Nordic questionnaire was adapted to assess musculoskeletal health.

Results Five hundred and twenty-seven participants were enrolled in the study with a mean age of 28.86 years and extremes ranging from 19 to 55 years. Prevalence of UL-MSDs in the study population was 10.6%. The univariate analysis showed that UL-MSDs in army officers were significantly associated with : age ($p < 10^{-3}$), job seniority ($p = 0.009$), weekly worked hours ($p = 0.007$), wearing a helmet ($p = 0.039$) and job strain ($p < 10^{-3}$). According to the multivariate analysis, determinants of the risk of UL-MSDs in the study population were: history of upper limbs trauma ($p = 0.002$, OR=3.1; CI 95% = [1.49; 6.44]), age ($p = 0.001$; OR=1.89; CI 95% = [1.30; 2.73]), occupational category ($p = 0.047$; OR= 0.78; CI 95% = [0.62; 0.99]) and irregular working hours ($p = 0.008$; OR=2.99; CI 95% = [1.32; 6.75]).

Conclusion Prevention of UL-MSDs in army officers represents major challenges for military health professionals. Keeping a good operational capacity of military personnel is dependent on the establishment of an effective global preventive approach that covers the various aspects of the work in this environment, while respecting its particularities.

P-244 FROM COMMERCIAL FISHERMEN TO RECREATIONAL BOATERS: FATALITIES AND LIFEJACKET USE INFORM THE NEED TO PROMOTE USE.

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Objective Vessel disasters and falls overboard result in fatalities in the commercial fishing industry and recreational boating. We reviewed available fatality surveillance data to identify opportunities to promote lifejacket use in the US Pacific Northwest.

Methods Commercial fishing fatality information for 2000–2018 was obtained for all fatalities in Oregon and Washington waters from the Commercial Fishing Incident Database (CFID). Recreational boater fatality information was obtained from the Oregon and Washington State Marine Boards' publicly available information. Summary statistics were compiled and lifejacket policies reviewed for both occupational and recreational uses.

Results In Between 2000–2018 In Washington and Oregon there were 90 commercial fishing fatalities; only 5 (6%) victims were wearing a lifejacket, with 3 of those not properly worn. From 2000–2018 in Oregon there were 263 recreational boating fatalities with 76 (29%) victims wearing a lifejacket. In Washington, available data was limited from 2011–2017, there were 52 recreational boating fatalities with no lifejacket information. Commercial fishermen and recreational boaters over the age of 12 years are not required to wear lifejackets while boating, although Coast Guard-approved devices must be provided for each person onboard. Lifejacket use marketing promotions exist such as the 'Live to be Salty' campaign for commercial fishermen and 'Life Jackets and Seat Belts-It's Your Choice' for recreational boaters.

Conclusion The percent difference in lifejacket use between commercial fishermen and recreational boaters who suffered a fatality likely represents differences in the precipitating factors in the incidents, and the ease of wear for tasks. Primary prevention of vessel disasters and falls overboard is critical; as lifejackets are essential in the event of an emergency. A

regional intervention based on a successful program for lobstermen is proposed to bring lifejacket education, try-before-you-buy and discounts to commercial fishermen and recreational boaters that will be evaluated for impact and change of culture.

P-245 IMPACT OF FOOD ON DIVE'S SAFETY

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Introduction Professional diving is an activity that exposes the diver's body to numerous environmental and physiological challenges. These require adequate physical and mental health conditions as a prerequisite for the task's safe performance. The diver's diet is an underestimated risk factor that has not been properly studied so far. Thus, due to lack of dietary recommendations, many times divers make basic dietary mistakes that can lead to undesirable outcomes, from abdominal discomfort to death by drowning.

Objective To determine how food and physiological changes due to immersion and hyperbaric exposure can interfere with diving safety.

Methods

Literature review

Results Food-related factors can lead to life-threatening risk conditions, since situations that would normally be considered just inconvenient and uncomfortable can be potentially fatal when they occur underwater, such as vomiting, for example. Especially considering the diet specific factors: volume of the food, nutritional composition of the diet, and the time interval between the last meal and the dive, the food can be a hazard associated with risks that can compromise the safety in the dive. These risks can be divided into direct - such as hypoglycemia, dehydration, gastrointestinal barotraumas (mainly resulting from aerophagia and gastrointestinal producing conditions), and regurgitation with vomiting or bronchoaspiration - and indirect - such as increased cardiac risk and increased decompression stress (which could lead to decompression sickness despite the correct application of the decompression tables).

Conclusion Healthy eating is a fundamental part of ensuring a healthy lifestyle. Given the particularities imposed by immersion and hyperbaric exposure, the diver's diet should be considered an important aspect in promoting health and diving safety. Awareness of the risks and knowledge of measures to increase the safety of diving can lead to beneficial changes in habits and, consequently, in the safety of diving operations.

P-246 'HEALTH AND WORKING CONDITIONS OF WASTE PICKERS: SCOPING REVIEW.'

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Introduction It is estimated that between 15 to 20 million people in the world recover materials from waste in an informal condition. Many living in poverty, become involved in the activity because they do not have an accessible job opportunity. This need leads them to be exposed to unhealthy,