was significantly associated with LBP, even when adjusted for other known predictive factors. Thus, preventive initiatives for low back pain among healthcare workers must focus on limiting manual patient handling and include the use of proper mechanical patient handling equipment and training on the use of these equipment.

Introduction

Fishery is a hazardous industry with high occupational fatalities, mainly due to vessel disasters, especially among smaller vessels, according to European and North-American studies. However, Asian countries with different industry status and larger portion of global marine capture production are short of adequate investigation.

Methods

In Taiwan, Fisheries Agency provided compensation for maritime fatalities and capsizing vessels, and recorded all enrolled crews and fishing vessels in Fishery Administration Management Information System. Using these two databases, incidence rate and odds ratio (OR) were calculated to depict an overall picture of maritime fatal accidents and associated causal factors.

Results

From 2003 to 2015, there were 562 cases of fatal accidents, whose mechanisms were man overboard (368, 65.5%), followed by capsizing (193, 34.4%). Overall incidence rate was 3.6 per 10 000 man-labour year. The rates were 2.51, 4.12, and 7.18 per 10 000 man-labour year, and odds ratios were 1.0, 1.64 and 2.60, for coastal (<12 Nautical miles, Nm), inshore (12–200 Nm), and deep sea (>200 Nm) fisheries.

There were 632 cases of vessel capsizing, whose mechanisms were fire (162, 25.63%), followed by natural disaster, mechanical problem (85, 13.45%), and collision (71, 11.23%). Overall incidence rate was 152.01 per 10 000 vessels. The rates were 7.15, 21.42, 71.48, and 151.95 per 10 000 vessels, and odds ratios were 1.0, 3.00, 10.05 and 7.29, for small-sized (sampan and fishing raft), small-medium-sized (<20 gross registered tonnages, GRT), medium-sized (20–200 GRT) and large-sized (>200 GRT) vessels.

Conclusion

Our findings showed the mixed effect of vessel size and fishery types on maritime fatal accidents, and deep-sea medium-large-sized vessels, as the smallest vessels in deep sea fisheries, had the highest risk. Compared with other developed countries, more than half fishing vessels of deep sea fisheries in Taiwan are less than 100 GRT, and preventive intervention should be focused on these vessels.

Introduction

Fishery is notorious for its high maritime fatalities. Apart from fatal accidents, acute illness without timely emergency medical care may be another important reason for maritime fatalities. However, compared with fatal accidents, maritime fatalities due to acute illness are much less discussed and investigated, and there is need for epidemiological evidence to support and develop preventive strategies.

Methods

In Taiwan, Fisheries Agency provided compensation for maritime fatalities, and recorded all enrolled crews in Fishery Administration Management Information System. Using these two databases, incidence rate and odds ratio (OR) were calculated to depict an overall picture of maritime fatalities due to acute illness and associated causal factors.

Results

From 2003 to 2015, there were 665 cases of maritime fatalities, whose mechanism were fatal accidents (562, 84.5%) and acute illness (103, 15.5%). Overall incidence rate of maritime fatalities due to acute illness was 0.67 per 10 000 man-labour year. The rates were 0.27, 0.70, and 2.58 per 10 000 man-labour year, and odds ratios were 1.0, 2.60 and 9.65, for coastal (<12 Nautical miles, Nm), inshore (12–200 Nm), and deep sea (>200 Nm) fisheries.

Conclusion

Our findings showed that one in seven maritime fatalities is due to acute illness in Taiwanese fishing vessels, and deep sea fisheries had the highest risk, followed by inshore and coastal fisheries, which may be explained by difference in accessibility to emergency medical care. This calls for intervention like regular health screening and occupational health service to prevent the occurrence of acute illness in advance, especially in deep sea fisheries.
may explain the inconsistent with previous studies, and further exploration for other reasons was warranted.

Conclusions The health impact of occupational upper limb injury are multiple aspects, including psychological, return to work, and quality of life. Further studies with longitudinal follow-up are needed to further elucidate their associated risk factors in different stages post-injury, which could be useful for prevention of workers’ long-term disability.

P.3.10 CAUSES AND CONSEQUENCES OF WORK ACCIDENTS IN ESTONIAN AGRICULTURE

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Introduction Work accidents (WA) in agriculture are a problem all over the world. There are over 1.3 billion agricultural workers, that counts more than 50% of all the worlds’ workforce. Even if the most of work tasks become more automated, farmers, family members and farm workers are facing risks at work that are higher than in most other occupations. Many accidents involve the handling of machinery or animals. The costs of WAs are increasing, exhausting national economy as a whole. The aim of this study is to analyse the main causes and consequences of WAs in Estonian agriculture.

Method The database of accidents in agriculture (2008–2017) has obtained from the Estonian Labour Inspectorate. WAs statistics is based on official reports of employers. Causes and consequences including injury severity, type and body region are described in the present study.

Results The main cause of WAs in agriculture is disregarding safety requirements (28,9%), whereas more than half of cases remain unclear. Loss of control over animals or machinery (33,4%), falling and slipping (21,5%) and an attack or an assault by cattle (15,8%) are the main activity-based reasons of WAs. During the last decade the most were minor injuries (72,8%). By the type of injury most often wounds (40,4%), bone fractures (25,6%) and superficial injuries (40,4%), bone fractures (25,6%) and concussion or internal injuries (16,2%) have been registered. Upper and lower limbs (35,7% and 33,6%) were the most often injured body regions.

Conclusions Agriculture is a sector with high accident risks, where injury rate shows steady tendency to increase. It is important to pay more attention on improvement of safety culture and prevention of work accidents in agriculture.

P.3.11 IMPLEMENTATION OF COMMUNITY-BASED OCCUPATIONAL HEALTH PROGRAMS FOR INFORMAL WORKERS IN INDONESIA

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Background More than 1,750 Nepalis leave the country daily for foreign employment. A total of 6.39.167 aspirant migrant workers left for various countries in last fiscal year 2016/17, up from 418,713 in previous FY 2015/16. Most of the migrant workers anticipated is hot humid climate countries for occupational work especially chemical, biological hazards.

Methods It is the retrospective study among return migrant male 100 case reports with non-migrant control reports in (2016 Jan–2018 Nov.) years. Data of Semen analysis reports (questionnaire for duration of infertility, sperm count, percentage of normal sperm morphology, percentages of sperm), BMI, mini mental health examination and family details data was collected. Descriptive statistics, analysis of variance, and correlations were conducted using SPSS 21.0 and Epi Info.