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# Why do Filipinos have fewer reported work accidents than other nationals? Findings from literature

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# **ABSTRACT**

According to statistics, Filipinos working on Danish ships experience fewer work accidents than their colleagues. In an ongoing project, we are trying to find out what lies behind the figures. The first step of the project is a review of recent studies on the relationship between nationality and safety. The reviewed studies confirm that there is no reason to believe that employees' ethnic or national background determines their safety practice, all things being equal, mainly because things are never equal. If we are to believe the reviewed studies, it is not the minority or migrant status, as such, which makes employees vulnerable, but more likely convergent factors.

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Key words: maritime medicine, safety of seamen, multicultural workplaces

# INTRODUCTION

Shipping companies and flag states are faced with the growing challenge of handling a culturally diverse workforce, and when monitoring the safety performance of employees, they often find large differences relating to nationality. It is well known that accident rates should be compared with caution as there are many factors confusing the results. However, when employees work in the same workplace and the reporting methods are standardized, the picture should be clearer. So when employees of certain nationalities repeatedly stand out as 'safer', it is obvious to assume that they have a national safety culture, which is so strong that it survives the encounter with the dominant safety culture of the workplace and grants them a better safety practice than that of their colleagues.

Filipinos working on Danish ships experience less work accidents than their Danish colleagues according to published statistics [1], so in an ongoing project, Safety Culture and Reporting Practice on Danish ships in the Danish International Ship Register (SADIS), we are trying to find out what lies behind the figures. We use qualitative and quantitative methods (participant observation, interview, database of accident reports from several sources, and medical reports). The project is financed by the Working Environment Research Fund.

# **MATERIAL AND METHODS**

The first step of the project was a review of recent studies on the relationship between nationality and safety (mainly in terms of work accidents). Studies on the following topics have been collected over a time span of some years: national differences and safety; minority workers' occupational health and safety; multicultural crews in seafaring; and underreporting of work accidents at sea. The studies have been collected by various means, including database searches. The 31 studies included have been selected for their relevance, and not as the result of a systematic criteria-based quality assessment.

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### **RESULTS**

The studies about national differences and safety which we have included fall into three categories:

- comparison of injury rates between countries or regions;
- comparison of health status or injury rates between minority and majority citizens, or migrants and natives, within a state;
- studies of multinational crews in the shipping industry.

#### **DIFFERENCES BETWEEN COUNTRIES OR REGIONS**

There seems to be general agreement to be cautious when drawing conclusions based on comparisons of injury data from different countries, since the statistics are unclear for the following reasons: The criteria for what is considered a work accident vary between countries [2]; the occupations which are included vary; and so does the proportion of underreporting [3, 4]. It is, however, a global trend that the injury rates are higher in developing countries, where there is greater danger and less control (4), and where the general health condition is also worse [5].

# MINORITY AND MAJORITY CITIZENS, OR MIGRANTS AND NATIVES, WITHIN A STATE

Most of the studies show that immigrants are at high risk regarding occupational health exposures, injuries, and diseases. Many studies also tell of socio-economic problems, marginalization and lack of health and safety training. Insufficient surveillance of the foreign workforce and problems with receiving treatment and compensation for work injuries are also a common tendency. Together, these factors paint an alarming picture of the general health of immigrants, which is also the main conclusion of Ahonen et al.'s review of 48 articles [6]. In the light of Ahonen et al.'s conclusion it is noteworthy that in fifty per cent of the ten studies regarding work accidents, there is no difference between natives and immigrants. The same result is reported in a review on immigrants in Europe by the EU [7]. According to the authors, immigrants tend to work on less favourable terms, but when it comes to accident rates, the picture is blurred, since some show a significant overrepresentation of immigrants, while others do not show any difference.

A small proportion of studies have even found a lower mortality rate among ethnic minorities. Razum et al. reported a lower mortality rate for Turkish immigrants in Germany than that of Germans, which they

explain with the 'healthy migrant effect' [8]. Abraido et al. reported a lower mortality rate for Latinos than for Anglo Americans in the United States [9], the rates for mortal work accidents are not specified, however, and Dong reached the opposite result when studying work injuries for Spanish-speaking workers in construction [10]. Richardson et al. [11] reported a significant increase in the proportion of Spanishspeaking injured persons in the South (of the US) from 1990 to 1996, which reminds us that numbers do not only vary within sectors, but also across time. The authors' explanation of the increase is the growing number of unregistered seasonal workers in the South. The natural order of things seems to be confusion when attempting to compare the mortality rates of Spanish-speaking Americans, Anglo-Americans, and Afro-Americans [12].

Wu [13] reported that immigrants in Taiwan have fewer reported work accidents than the native population, which is especially true for Thai and Filipino immigrants. The risk, however, is dependent on the industrial sector, and similar to other studies they report an increased risk for those who have only been in the country for a short period. Most studies connect this finding with a lack of language knowledge [7, 14]. Baker et al. [15] studied the racial distribution of death from un-natural causes in the United States of America, finding that Asians have the lowest proportion of all accidents, suicides, and murders. The authors draw attention to underreporting, however, as do many others, for example Ahonen et al. [6].

The EU's Occupational Safety and Health Agency (OSHA) has a point about immigrants' working conditions, which seems to apply throughout the world:

"The working conditions of migrant workers are often less favourable than those of native workers: work is more often physically demanding and monotonous, working hours longer, wages lower and migrant workers tend to do more shift work than native workers. Data on occupational accidents are somewhat contradictory. Many studies suggest that the jobs of immigrants entail higher risks for accidents and that migrants are more often involved in occupational accidents. In those studies where migrants and natives worked in the same jobs and in the same organizations, no differences in occupational diseases were found" [7].

Apparently migrants and natives seldom perform the same jobs in the same organization, so perhaps the conclusion above is oversimplified. The more detailed and specific the investigations are, the more complex are the results. A result that does not show

differences among ethnic groups may be due to the fact that the groups share the same kind of jobs and living conditions [16], but it may also be the case that a number of positive and negative factors balance the score. To demonstrate the nuances that need to be accounted for and the uniqueness of each study, we quote a passage from Nuwayhid et al. [17], trying to explain why immigrants and natives have the same number of accidents in Lebanon:

"On one hand, this might be an actual finding, because some of the Lebanese workers might be internal migrants who moved from rural or distant areas in Lebanon, and who consequently accepted working and living in conditions similar to those of their non-Lebanese counterparts. Moreover, as migrant workers may be selected for their good health and physical abilities, what is known as the "healthy migrant effect" (...), these workers might be truly experiencing less severe injuries. A third explanation could be that, in Lebanon, language is not a barrier or a risk, as suggested by Corvalan et al. (1994), as an estimated 80% of the non-Lebanese workers are Arabic-speaking. On the other hand, the lack of difference in injury severity by nationality might be a spurious finding, reflecting only differences in postinjury access to, and utilization of, multiple medical care systems".

When we examine the studies closer, the category of national/ethnic descent does not have much explanatory power — due to the many nuances that appear and the small grounds for generalization. The importance of framework - and local conditions - is confirmed by two other studies, which, however, do not study ethnic minorities directly. The first is a study from the construction of the bridge between Denmark and Sweden. The Danish workers had four times higher accident rates than the Swedish [18]. Compared to other studies, it is remarkable how the two groups seem to perform the same task in almost the same conditions." At certain work sites Danish and Swedish workers were employed in the same organization and in cross-national work gangs (the languages are very similar) with the same type of tasks. The same procedures for injury reporting, measurement of man-hours, and calculation of losttime injuries were used in all parts of the project" (ibid. p. 519). But the Devil is in the details, and so the two groups differed in important aspects. The Swedish construction workers had more training than their Danish colleagues in the same job, they had more health and safety training, and they were more experienced. The Swedish construction workers tended to be regular employees in contrast to the short-term contractual Danish workers, and the Swedish companies spent more time on planning, including safety planning. Also the Swedes had more reasons not to report minor accidents, as they had to pay for their first day on sick leave, which the Danes did not have to. Pekkarinen and Anttonen reported a cohort study of two groups of Finnish workers, one in Finland and the other in Russia [19]. In order to explain why the Russian group had more - but minor - accidents, the authors listed some differences in local working and framework conditions. The reviewed land-based studies confirm that there is no reason to believe that employees' ethnic or national background determines their safety practice, all things being equal, mainly because things are never equal. A study from the oil and gas sector [20] argues that the cultural background of the employees is less important than the culture emerging at the workplace, and that leadership is the determining factor.

If we are to believe the reviewed studies, it is not the minority or migrant status, as such, which makes employees vulnerable, but convergent factors. According to the European Agency's report from 2009 [21] these factors are: Lack of language knowledge, short or insufficient education, and employment in dangerous occupations. Other factors that might apply are discrimination [22] and bad socioeconomic conditions [6]. Most studies suggest an over risk of underreporting from ethnic minorities because of their invisible and marginalized position [6, 22].

# STUDIES IN THE SHIPPING INDUSTRY

Seafarers working for a principal of a nationality different from their own are a potentially vulnerable group, comparable to migrants, because, as the ILO states, "...contrary to migrant workers, serving foreign seafarers have no residence in the State in which they 'legally' work, and therefore no line of communication or political influence within that State. In short, seafarers employed in the international labour market often have difficulty in pursuing their legal claims in the flag State for various reasons, including against an absent ship owner or in the absence of local assets. Although in a legal sense they work in a specific country and should therefore come under the jurisdiction of that State, they are unable to have their rights enforced" [23].

We will now have a look at studies that can inform us about determinants, including nationality, for work accident risks in seafaring.

Hansen et al. in 2002 [24] investigated almost 2000 accident reports to the Danish Maritime Authorities and/or the Danish Shipowners' Accident Insurance Association, from Danish cargo ships between 1993 and 1997. The authors found that foreigners have a significantly lower accident rate than Danish citizens; that the risk of permanent disability increases with age; that the risk of having an accident is higher in the first part of the period that a seafarer is on board, and when mustering an unfamiliar ship; and finally that the most serious accidents occur when moving around on the deck. The authors found indications of underreporting, e.g. the rate of serious accidents occurring on coasters being too high compared with the rate of minor accidents, and they also suspect that the foreigners' low number of accidents resulting in disability is due to a lack of knowledge of their legal rights.

Jensen et al. [25] conducted a survey of self-reported health and accidents among 6,461 seafarers from 10 countries. The authors found significant differences in self-reported accidents among nationalities, also after controlling for other risk factors. Seafarers from China, Great Britain, and Spain had the highest rate after control, while Indonesian, Filipino, and Polish seafarers had the lowest. In line with Hansen et al., Jensen et al. mentioned underreporting as an influencing factor.

In Norway differences among nationalities have also been detected. Data from the Norwegian Maritime Authority show that between 1995 and 2000 Norwegian citizens on Norwegian ships experienced an accident four times more frequently than Filipinos. Lamvik and Bye analysed this data in a qualitative and interpretative manner [26]. They suggested that the Norwegians are more prone to take risks, because Norwegians value their work per se and praise individuality and initiative in contrast to the Filipinos who value their work as a means to support their families. However, they also mention underreporting (ibid. p. 2)

In 2008 Hansen et al. repeated their study to confirm their earlier results, and they included contacts to Radio Medical and sick pay records as additional sources of information [1]. Their results confirm that East Asian seafarers (of whom the majority are Filipinos) have three times fewer reported work accidents than West Europeans (most are Danes), while East Europeans are positioned in between. The study also shows that not all accidents were reported: of the 100 contacts to Radio Medical concerning work accidents, 41 were not reported to the au-

thorities. When they compare serious accidents only, the difference between West Europeans and the rest decreases. The authors conclude that a difference in the reporting rate cannot fully explain the gap between the accident rates of the studied populations. A large proportion of the difference is due to the large number of back injuries among the West Europeans, which suggests that the latter are in worse physical shape. They also refer to Lamvik and Bye [26] and suggest that cultural differences play a part.

Dahl et al. [27] collected all data on accidents occurring among the 630 crewmembers on a large cruise ship over a period of three years. Filipinos, who made up half of the crew, only accounted for 35% of the accidents. There were Filipinos working in all areas and departments of the ship, and the authors are not able to explain this difference among nationalities.

Bell & Jensen [28] investigated repatriations (n = 507) in a six-month period among crewmembers with 125 national origins in the 29 cruise ships of one shipping company. Since the Filipinos were significantly underrepresented in diagnoses derived from psychiatric problems, the authors suggest that the widespread use of psychiatric tests in medical clinics in Manila and the strong social network of the Filipino seafarers might explain this finding.

# **DIFFERENCES IN ACCIDENT REPORTING RATES**

We found a few studies about underreporting as such. Ellis et al. [29] compared the proportion of fatal accidents to that of other accidents, with the purpose of pinpointing bias in the accident report registers as well as areas of systematic underreporting. They found a bias relating to nationality and type of ship. Filipinos reported fewer minor accidents than other nationalities, and the same is true for dry cargo ships compared to other types. Their conclusion is that differences in the accident rate are due to differences in reporting rate.

In his Ph.D. dissertation, Bhattacharya [30] offers an explanation of why underreporting is widespread. He closely studied the reporting practice of two shipping companies. The management representatives he interviewed believed to have a no-blame culture and found the seafarers to be unnecessarily concerned about being blamed for accidents. However, it turned out that the seafarers' fear was justified, as the accident investigators' focus on the human factor had led to a practice of first and foremost looking for violation of the company procedures and instructions, which pinpointed the seafarers.

Oltedal & MacArthur [31] surveyed 83 Norwegian ships by means of a questionnaire in order to see which safety culture factors correlated with a high vs. low accident reporting frequency. Their study shows that the following factors lead to a high reporting frequency:

- safety training;
- an open and trustful work environment;
- safety oriented leadership;
- a proactive approach to risk analysis;
- feedback on reported incidents.

Whereas 'demand for efficiency and lack of safety focus from the shore management' correlated with a low reporting frequency.

#### **CONCLUSIONS**

Language, a healthy migrant effect, and underreporting seem to be the most important causes of the differences between nationals. However, seafarers are different from migrants.

Language knowledge is not an issue since English is the lingua franca in seafaring, and the second language to Danish and Filipino seafarers alike. Access to information is likely to influence the reporting rate if important information is only to be found in the native language of the flag state, but this should influence all foreigners, not especially Filipinos.

In principal, all seafarers are healthy migrant workers as they have to pass a test before embarking, but there are variations in the demands, and there are strong economic interests in the health of seafarers. There is also a global surplus of ratings and a tough selection process in the Philippines, which probably means that the healthy worker effect is stronger for Filipinos than for Danish seafarers.

So in two respects Filipino seafarers should not be much worse off than their Danish colleagues. Underreporting might pull in another direction, though. Several authors [3, 4, 8, 10, 15, 23] have argued for a lower reporting rate among migrants, and there are some reasons to believe that, to some extent, their reasons also apply to Filipino seafarers, namely: invisibility; marginalization; discrimination; low job security; fear; and lack of knowledge of their legal rights.

The review confirms that there is no one-dimensional relation between safety and nationality as many factors are always at play and "national culture" is not a clear-cut concept. Furthermore, the rate of underreporting adds to the confusion. Non-nationals (minorities, immigrants, or in our case, seamen

from countries outside OECD) often have a marginal position, and it seems that underreporting is especially a problem for these categories of workers.

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