

## ANALYZING THE PROBLEM OF MENTAL HEALTH OF THE SEAFARER WORKERS AND ITS IMPACT ON OCCUPATIONAL HEALTH

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### ABSTRACT

It is often believed that seafarers are exposed to both physical and psychological hazards on the job. Nonetheless, unlike physical health, the mental health of marines has received less attention. There is a paucity of systematic, in-depth analyses of the causes and contributing factors of mental health issues. Ninety-six percent of respondents ranked mental health as either very or very essential to their overall health. Sailors believe that COVID-19 has had a significant negative influence on their mental health. There is both a theoretical and practical component to this subject. Some of the theoretical work has focused on determining the prevalence of depression among mariners, its causes, and effective treatments. First aid was the primary treatment for sailors' injuries, while medicine was used for diseases. Findings from this study's third and final section attempt to provide answers to the questions addressed in the study's introduction, including how to combat depression aboard ships and lower the suicide rate among marines.

**Keywords:** Work Environment, Pandemic, Mental Health, Seafaring and Problems

### INTRODUCTION

KVH Video Tel and ISWAN have collaborated to provide a free training package titled Seafarers' Mental Health and Wellbeing. Unlike on land, seafarers are less likely to have access to stress-relieving activities over the course of their workday. The goal of Seafarers' Mental Health and Wellbeing is to highlight the constructive actions that seafarers may take to improve their own and their crewmates' resilience in the face of adversity at sea. The training package may be utilized for both solo study and group instruction both at sea and on land. In addition to our Good Mental Health Guides, the package also includes a 23-minute film to be seen before and during training sessions aboard ships.

It is often believed that seafarers are exposed to both physical and psychological hazards on the job. Heat, cold, noise, vibration, multiculturalism, multinationalism, social isolation, loneliness, separation from loved ones, piracy, and crime on board are all potential health risks. Work for seafarers often entails a hierarchical organisation, shift work, and a lack of clearly defined work and rest periods.

The stress, sadness, burnout, and, in the worst instances, suicidal thoughts that some seafarers experience as a result of the mental and physical strains of their jobs are well-documented. In a similar vein, researchers found that 5.9% of mariners died by their own hand between the years 1960 and 2009. Care for sailors' mental health should be a top priority. When compared to physical health, attention to seafarers' mental health has been lacking. Only three recent review studies have examined the mental health of maritime workers. In the first investigation, researchers found that only 10.61% of all studies focused on psychological functioning and different elements of mental health among marine employees. The second study found that

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rates of suicide and disappearance at sea among sailors (who are often incorrectly presumed to have committed suicide) were useful indicators of mental health. Personal variables and the maritime work environment may have contributed to incidents of missing at sea, but they were not included in the research that used an association or causal link study design. Even though research on depression and suicide among mariners is limited, the most recent one has focused on the increased risk of these conditions due to stress and isolation. This suggests that there is a shortage of both scoping studies and systematic, complete reviews in the domain of mental health among seafarers. In 2012, the United Kingdom and Australia initiated an important mental health initiative with the aim of enhancing the health and happiness of the maritime workforce. Although seafarers' working circumstances are physically and socially hazardous, studies focused on well-being or psychological elements of health have not been undertaken to the same extent as research concerned physical health. This scoping study, which attempted to carefully map the data pertaining to mental health difficulties and their associated determinants, was conducted with the goal of clarifying useful treatments to these problems for seafarers.

## LITERATURE REVIEW

**Agnieszka Rzepka et al (2021)** This book offers helpful guidance for navigating the ever-changing IT landscape that characterizes today's corporate operations. Using the innovative concept of teal organisations as its foundation, this book demonstrates the usefulness of advocating for a flat organizational structure in which positions are not fixed in advance and where roles come with clear accountability that are continually defined in accordance with current needs. Frederic Laloux popularized the concept of a "teal organisations," which is a new approach to leading businesses. As Laloux explains, it makes everyone a leader. Its basic tenet is that a more spiritual and meaningful work environment will emerge as a consequence of employees' increased agency. This book, based on the authors' study in six different nations, looks at how the teal idea has been applied in various areas of the globe and how self-management and entrepreneurial culture have changed in the era of Economy 4.0. Across six nations, the authors collected data for their study. We look at common misunderstandings of this innovative method, as well as the real-world challenges of putting it into practice in the present climate of unpredictability.

**Hemming (2020)** The project employed a mixed-methods strategy, including four interconnected studies. Participants in Study 1 filled out a cross-sectional online survey (Study 1) that assessed demographic and long-term care (LTC) factors, as well as activation, self-efficacy, and quality of life and wellbeing (QoL). This research collected data from 736 workers across many industries, including those dealing with mental health, MSK, and other LTCs. Quantitative techniques (analysis of covariance, t-tests, chi-square tests, regression, and multi-level modelling) were utilized for the survey and online diary, whereas qualitative techniques were employed for the in-depth interviews (content, thematic, narrative thematic and narrative structural analyses). The results of this research support the idea that giving workers greater leeway, autonomy, and transparency in their workplaces is advantageous. There is a wide range of psychological and social factors that might affect an employee's ability to self-manage. Although managers and executives may not realise the impact, they have on their workers' ability to self-manage their LTC, they do have a role to play and may benefit from guidance on how to do it effectively. In this research, we highlighted the needs for workplace assistance and developed a paradigm for self-management of psychosocial LTC.

**Gill Hasson (2020)** Companies have struggled to provide for their employees' emotional and psychological well-being despite recent efforts and advancements. If you or a coworker are struggling with mental health issues, go no further than Mental Health & Wellbeing in the Workplace for guidance. This comprehensive

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manual on employee and supervisory mental health and wellbeing is a valuable resource for any business. Gill Hasson and Donna Butler explore the ways in which organisations might improve their workers' mental health, as well as the evolving perspectives of both employers and employees in this area. Studies and surveys may help with a broad variety of problems that may occur from the perspectives of both employers and employees.

**Arkaprabha Sau (2019)** Many sailors suffer from anxiety and depression. Thus, it is crucial to their health to undergo routine testing for anxiety and sadness. Utilizing an automated screening technique, it is feasible to use machine learning technology to quickly identify at-risk mariners who might benefit from mental counselling and treatment. Using machine learning techniques to examine mariners for signs of depression and anxiety. The research was conducted with the proper permissions and ethical clearances at the Haldia Dock Complex in India, where 470 sailors were interviewed. For this study, researchers collected information on a variety of topics, including demographics, profession, and health. The Hospital Anxiety and Depression Scale was then used to assess the levels of anxiety and depression. CatBoost, Logistic Regression, Naive Bayes, Random Forest, and Support Vector Machine were the five machine learning classification models analysed in this Python study (SVM). In this context, CatBoost was shown to have an accuracy and precision of 82.6% and 84.1%, respectively. The focus of this study is on the use of machine learning techniques to the automatic detection of mental diseases.

**Joanne McVeigh et al (2019)** One example of secondary data collection is a survey taken by a multinational maritime company of its crew members to learn more about their perspectives on the work. Structural equation modelling was used to examine the relationship between a theoretical model of subjective stress and job satisfaction in a population of merchant mariners. Although the model had satisfactory results for goodness-of-fit statistics, it performed poorly on the Tucker-Lewis index and the comparative fit index. Dispositional resilience was shown to have a significant relationship with the criterion variable of perceived stress, with the model explaining 23.8% of the variance in this variable's value. Job satisfaction was the criterion variable, and instrumental work support was the most predictive factor, explaining 70.6% of the variance. It shows that instrumental work support is an important component in connection with job satisfaction, whereas dispositional resilience may be especially important when addressing the mental health of merchant seafarers. However, the mental health and well-being of seafarers depends on their working in an atmosphere that is helpful, equitable, and fair.

## **FACTORS INFLUENCING DEPRESSION ON BOARD**

A depressive episode often begins when a person experiences a significant life change. These shifts might first manifest as occurrences but eventually converge on underlying reasons. Every day, we are exposed to new experiences, some of which will have a greater impact on us than others. Here we'll look at some of the factors that might lead to depressive thoughts and feelings:

### **Environmental Factors**

The circumstances of our lives, including the nature of our jobs and the social and environmental pressures we confront, might contribute to depressive episodes. Potential environmental contributors to depression include, for instance:

**Fatigue:** Fatigue is defined as "a decline in physical and/or mental state, resulting from physical stress" in the International Maritime Organization's (IMO) rules. Power, speed, response time, coordination, decision making, and/or mental stability might all be negatively affected. There are numerous potential causes of

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fatigue, but some of the most apparent include lengthy workdays, an inadequate crew, and a workload that exceeds the capabilities of the available staff. On top of that, we'll go through some of the ship's other potential fatigue-in.

- Subordinate crew members lacked the necessary skills.
- The unpredictable schedules and long hours that are part of everyday life at sea may cause exhaustion, which in turn increases the likelihood of mishaps of a psychological or emotional kind.
- Longer trips, particularly at night, have been shown to be more stressful.

Non-officers, especially younger ones, and senior sailors, in particular, face more fatigue-related risks than their officer counterparts. According to research published by the International Transport Federation (ITF) titled "Seafarer fatigue: Wake up to the hazards," the average number of hours spent working worldwide is shockingly high. Twenty-five percent of the ITF survey population reported working more than 80 hours per week on average. In many cases, sailors reported feeling tired right when they woke up, a feeling that only becomes worse during the course of the shift and becomes more noticeable after the first week at sea. The quality of life on board is being deteriorated, and the health and safety of the crew is being put at risk. It's possible that these many causes will anxiety and melancholy among mariners. Intense physical exertion, both isometric and dynamic, along with the stress of working in high temperatures, may be a critical component in the development of a cardiac arrhythmia. At the very least, objective demands, subjective stress, and reported health concerns should all be taken into account when designing fatigue-related metrics. In a cross-sectional study of sailors across two nations researchers found that mental health issues such as depression and sexual dysfunction are strongly linked to prolonged periods of work-related stress.

**Limited Recreation Activity:** Even though there are a variety of forms of entertainment that may help seafarers unwind and relax, their limited free time means they seldom engage in the forms of entertainment and sport that might help them unwind and cope with the stresses of life at sea. Depression risk has been linked to a lack of recreational activity, according to a number of studies. Emotions, according to studies, may have positive or negative consequences on your mental health. Some seafarers are more susceptible to depression since they don't have enough opportunities to relax and have fun while at sea.

**Loneliness:** When you choose to be a seafarer, you're agreeing to take on the challenges and rewards of that lifestyle. Since they might remain at sea for weeks or months at a time before making port, sailors have one of the lowest rates of social interaction of any occupation. The number of Western merchant mariners has been declining in recent decades, in large part due to the widespread recognition that social isolation is a key contributor to the development of psychiatric issues among mariners. Isolation has been linked to feelings of hopelessness, sadness, and even suicidal ideation in certain susceptible people. Being away from loved ones for extended periods of time may sometimes bring on feelings of isolation. Seafarers often cite homesickness as a major demotivator. According to a survey of 134 sailors, "extended absence from family" is the top source of anxiety at sea for 59.7 percent of respondents. When some of our loved ones are ill or when we are able to make touch with those at home, our stress levels rise noticeably.

**Sleep Deprivation:** A good night's sleep may do wonders for your mental health. Lack of quality sleep may have far-reaching effects on a person's vigour, drive, and mental state. Possibly mild sleep loss over a long period of time may have negative effects on mood and even reveal severe depression. prolonged feelings of sadness or emptiness It has been shown that persons who suffer from insomnia are

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more prone to feelings of despair and worry than those who sleep well. They have a 10-fold increased risk of developing major depression and a 17-fold increased risk of developing severe anxiety. Depression risk increases as does the frequency with which one's depressive symptoms keep them up at night.

**Multiculturalism and Nationalism:** While it is more usual for ships to employ a diverse range of nationalities and languages in their crew, little is known about how this may affect mental health on ships' personnel. According to the findings of one research, "cross-cultural communication on board tends to be more effective in terms of interaction and results when seafarers are culturally near, and less successful when they are culturally far from one other." The inability to interact and form bonds amongst crew members is a significant source of tension aboard ships. Distinctions in Maritime English pronunciation and use are strong indicators of cultural remoteness. The "cultural adjustment stage" is when a sailor could feel "mental pressure and psychological restriction" from not understanding the cultural limits with his or her crewmates, such as the fact that speaking one's home tongue might arouse suspicion among non-speakers of that language

### **Medical Examination and Health Assessments**

Employers in the maritime industry, like those in any other sector, often need prospective crew members to pass a medical screening before they are allowed to join a ship (PEMEs). These tests determine whether or not a sailor is fit for duty. If they pass the physical, they will get a medical clearance that will allow them to operate aboard the vessel. Before signing a contract for a journey, all sailors must do this. The problem is that these

Exams tend to concentrate on the employee's physical health, and as a result, mental health issues like depression may go undetected. While the PEME has a lot going for it, it is not designed to identify mental health problems like depression or suicidal ideation due to the inherent conflict of interest between seafarers and their employers. This is because companies like to have healthy and fit crewmembers on board, while crewmembers themselves are interested in finding work regardless of their physical condition.

### **Gender**

It is often held that males predominate in maritime occupations, and statistics bear this out: only 1%-2% of the world's entire seafaring population is female. Anxiety, stress, and depression are, after back/joint pain, the most often reported health conditions among female seafarers, according to a survey conducted by the women's health and welfare organisations. Women sailors face double the effort and double the scrutiny required to earn the same respect as their male counterparts in an industry where women make up just a small percentage of the workforce. Employers that are biased against women who believe it's best for crew morale not to have women aboard because it can produce sexual tension and jealousy have a negative impact on women's ability to obtain and keep employment in the maritime industry.

### **Deep-Sea and Social Isolation**

The longer you are at sea, the more cut off from loved ones you become, and loneliness is a common theme on deep sea cruises. "Seafarers in deep sea trading ships are often at sea continuously for weeks or months and can be exposed to isolated social and working conditions, made worse by recent reductions in ship crewing numbers, as well as long term separation from family," write Roberts and Marlow to explain why 87% of suicides between 1967 and 2002 occurred on deep sea ships. Isolation from others is not a disease

but rather a fact of life that may have serious consequences for mariners. In the rigorous social environment of the sea, close friendships, emotional, and intimate exchanges are quite rare.

Those higher in the hierarchy or in authoritative positions feel the need to keep their distance. The crew of a deep-sea vessel sometimes spends months away from home and has few chances to keep in touch with friends and family, all of which may add to a sense of isolation. Although recent developments in technology have helped to lessen the impact of social isolation, most ships on the high seas, with the exception of passenger ships, still lack access to reliable internet.

### **COVID 19 And Its Effecton Seafarers**

The unique corona virus illness caused a global shutdown owing to its high infection and mortality rates. This illness struck persons of all socioeconomic backgrounds and cultural backgrounds, as well as all professions. Not only did this epidemic cause bodily harm, but it also caused some individuals to become mentally unstable.

Anxiety and sadness were more common among sailors during the corona virus epidemic since most of them were stuck aboard boats and unable to return home; this was made worse by travel restrictions. As a result, several sailors were forced to stay on the job for longer than expected. Antonio Guterres, the UN Secretary-General, called the plight of the mariners "a humanitarian and safety issue" (Webster, December 13,2020). The risk of injury and sickness on a ship is far higher than in a land-based job, so it's no surprise that workers might experience the same symptoms of depression that affect those in other fields. Recently, marine benefits conducted a study and discovered that 72% of respondents experienced a delay in crew change as a result of the pandemic, with 69% reporting a delay of up to 4 months and 5% reporting a delay of 8-10 months. Most individuals, particularly mariners, have experienced the difficulty of being separated from loved ones for extended periods of time in the midst of a pandemic. This is the world in 2020, and the mental health of seafarers has been severely impacted, just as in other fields.

### **SIGNS AND SYMPTOMS OF DEPRESSION**

The common symptoms of depression include a lack of interest in once-enjoyed activities, an inability to sleep, and an overall sense of worthlessness or hopelessness. These are only a few of the symptoms of depression, but there are many more that people may not be aware of. Some may attribute this to the stigma around mental illness, while others may attribute it to a lack of interest. Some individuals experience depression without understanding the source of their emotions, and this may carry on for a while before they decide to get treatment. It's important to remember that prompt treatment may save a life if these signs are recognized early on. Here are some of the most typical warning indicators.

- Having trouble dropping off to sleep.
- They gave out a tense and angry vibe.
- Lack of focus, forgetfulness, confusion, and indecision.
- Self-loathing and remorse are the results.
- struggling to strike a balance between job and personal life
- Irritability and worry that won't go away
- Very reactive, therefore they find themselves in a lot of disagreements and conflicts.
- Doesn't like being around other people, therefore they start isolating themselves and eventually giving up.
- Suicidal ideation, including occasional verbalization of such ideas.
- depleted of vitality and quick to anger.

- Lack of energy, both mentally and physically
- Misuse of drugs or alcohol
- Hopelessness and helplessness
- Disinterest in formerly enjoyable activities.
- Alterations in either hunger or body mass. To cope with their feelings of depression, some individuals choose to overeat, while others choose to lose their appetite.
- Low self-esteem and a pervasive feeling of worthlessness are a warning indication that should not be ignored since they may lead to suicidal ideation if not addressed.

Symptom recognition is a crucial first step in receiving treatment for this condition. The preceding symptoms are not required for a person suffering from depression to seek medical care. Experiencing more than a few of these symptoms is cause to seek assistance.

### **MEASURES TAKEN TOWARDS THE FIGHT OF DEPRESSION**

A primary focus from the first, depression has been and will continue to be an area of study for as long as it exists. The International Maritime Organization (IMO), the Finnish government, and a wide range of international organisations, such as the International Seafarers' Welfare Association (ISWAN), Shipowners, and so on, are all invested in the issue of crew members' mental health and well-being at sea.

International Seafarers' Welfare and Assistance Network (ISWAN)

Shortly addressing the various risks, recommendations, and potential remedies for crew members, ship operation personnel, and policy makers or executives, the International Seafarers' Welfare and Assistance Network (ISWAN) has released Guidelines for Mental Care Onboard Merchant Ships as part of the Seafarer's Health Information Program (SHIP). Since day one, many efforts had been done, and now their contribution to the relevant areas is well acknowledged throughout the world. Some of the mental health care ideas they have on board are as follows:

- After obtaining therapy, those with reactive depression and stress may return to their jobs without posing a threat to safety, however they may be assigned less difficult employment. If a seafarer has been diagnosed with a severe depressive disorder that poses a risk not only to the seafarer's life but also to the lives of his or her coworkers and the ship, he or she will not be allowed to return to work until they have been evaluated and have shown they are no longer a danger to themselves or others.
- In the event that a sailor develops feelings of depression, stress, or anxiety while at sea, they are welcome to seek the help of a port's welfare specialist. Having a way to get in touch with loved ones helps alleviate feelings of isolation and loneliness.
- People who are regarded to be depressed and considering suicide should be monitored closely. It's quite impossible to accomplish in practice, so keeping the sailor locked up in his or her cabin and keeping an eye on him or her are the best options. Other safety measures, such as getting rid of any weapons or drugs in the cabin or anything that may be used to hurt someone, should also be done.
- When a ship's crew feels more certain in their abilities and more at ease with their work, it's because they have a better understanding of their duties and responsibilities on and off the bridge.
- Sailors' emotional well-being is profoundly impacted by the ship's morale. Whether morale is low among the crew, they are less likely to "go the extra mile" when on watch or working on deck, which may have a negative impact on efficiency. The ship's morale is significantly impacted by the level and quality of communication among crew members. Sharing information that is accurate and current is essential to improving the competency of sailors and the morale aboard.

### **International Maritime Organization (IMO)**

Human Rights at Sea (HRAS), International Transport Workers & Federation (ITF Seafarers), and Seafarers & Rights International (SRI), an independent body adopting similar principles and values as the IMO in regard to seafarers, are all conventions that the IMO has adopted and enforced in the area of human rights.

On June 25th, 2018, the IMO chimed in on the rising maritime industry movement to improve the lives of sailors. Support Seafarers' Wellbeing on International Seafarers' Day (June 25). "Day of Seafarer provides a platform to advocate for higher standards of welfare and enable shipping companies and others within the industry to show how they provide a good working environment for seafarers and thereby make a positive contribution to their wellbeing," Kitack Lim, Secretary-General of the International Maritime Organization, said in his annual message. On this day, sailors are encouraged to fill out an online survey on their experiences at sea. The results of this survey are subsequently compiled and submitted to the IMO council. The campaign's upbeat theme encourages marines to talk about the good times they've had at sea, which may boost morale and show the bright side of their jobs. The secretary general of the International Maritime Organization (IMO) encourages all seafarers to get involved in the campaign and share their stories to bring the attention mental health issues deserve.

### **The Finnish Government and other Finnish organizations**

The Ministry of Social Affairs and Health created the Masto initiative to lessen the prevalence of both depression and depression-related disability. Its key goals are to promote workplace health and happiness, aid in the prevention of depression, guarantee effective treatment and rehabilitation, facilitate a speedy return to work, and cut down on disability payments due to mental health issues. Main features of the programmed, which is aimed at every one of working age, are:

- Workplace mental health and wellness promotion
- Programs designed to help people avoid depression.
- Recognizing and treating depression in its early stages
- Recovery and re-entry into the workforce.

In Finland and elsewhere in Europe, researchers have extensively examined the mental and physical toll that stress on the job may have on the human body. Epidemiological studies found a strong correlation between workplace stress and illness, which was discovered by Finnish researchers working alone or with colleagues in Finland. Among these illnesses were:

- Work factors such as time pressure, a negative work environment, and a lack of control over one's schedule are key contributors to the increased risk of mental illness among employees in demanding employment, such as sailors.
- Increased likelihood of burnout due to excessive job demands, bad work environment, and insufficient crew on certain boats.
- The probability of receiving a pension as a result of work-related depression is higher than average.
- Working conditions and occupations that cause stress have been linked to an increased risk of heart disease and death.

Municipal administrations, hospital districts, private service providers, and several other Finnish organisations are coordinating mental health care for seafarers. Help for depressed sailors is available from a variety of sources, including healthcare facilities, occupational healthcare, specialist psychiatric treatment, psychotherapists, and other groups. Larger cities often have more healthcare service providers and a wider variety of services due to the public and private organisations involved.



If a sailor is suffering from depression, he or she should first notify the ship's authorities, who will then arrange for the sailor to receive the necessary care ashore. The primary care a sailor receives comes from his or her healthcare centre or from occupational healthcare centers, and the quality of these services available to seafarers depends on the agreement between the shipping company and the occupational health care. When mental health services are needed beyond what can be provided by occupational health, a doctor may make a recommendation to a specialist.

government-funded medical care that corresponds to private care. Some communities employ depression nurses who can assist residents who are experiencing emotional distress. It is preferable to get a reference from the occupational healthcare physician, while some towns do enable people to arrange appointments with their mental polyclinic directly.

The patient must pay for private treatment since the psychiatric polyclinic does not provide regular, long-term psychotherapy. When a doctor refers a patient to psychotherapy, the patient may be eligible for financial assistance from the Finnish social insurance organisations, KELA

Seafarers were more likely to get unwell than injured in the last year, as seen in Figures 1 and 2. First aid was the primary method of treatment for sailors' injuries, while medicine was used for sickness (Figure 3). Hospitalization was necessary for 21% of injury cases, and work limitations were imposed on 13% of those injured. Medication was the primary method of care for illnesses (45%), whereas hospitalization (11%) and work restrictions (8%) were very uncommon. Only 4% of those injured and 3% of those sick required evacuation.

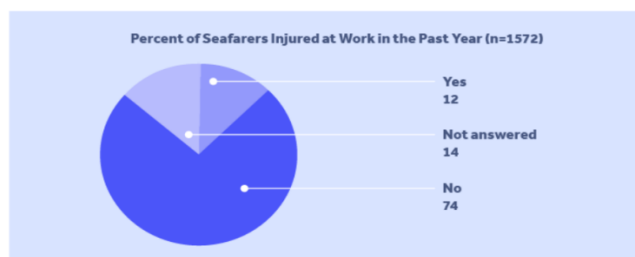


Figure 1. Percentage of seafarers reporting an injury while working on board during the past year.

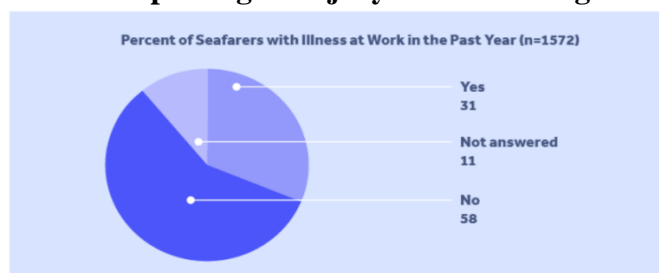


Figure 2. Percentage of seafarers reporting an illness in the course of work over the past year.

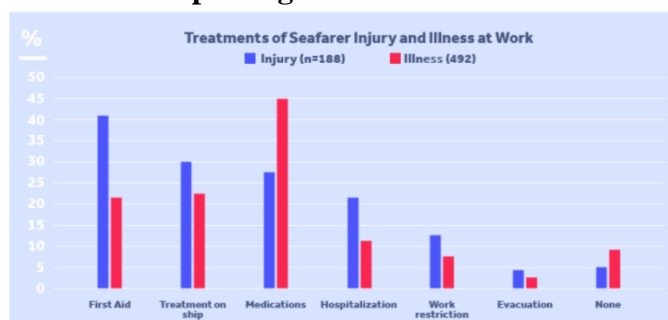


Figure 3. Treatments rendered for seafarer injuries and illness at work, an indication of the severity of the medical event.

THE IMPACT OF THE PANDEMIC ON THEIR WORK AND LIFE ONBOARD ARE ANALYZED

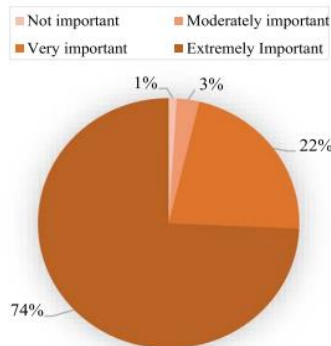


Fig. 4. Importance of mental health to general health.

Ninety-six percent of those polled ranked mental health as either "very important" or "very essential" to their overall health (Fig. 4). No one who participated in the survey selected "slightly."

More over half of the sample (58%), when asked how they felt COVID-19 impacted them, said it had a "very" or "severe" influence on their mental health and wellbeing, while 24% said it had a "moderate" impact (Fig. 5).

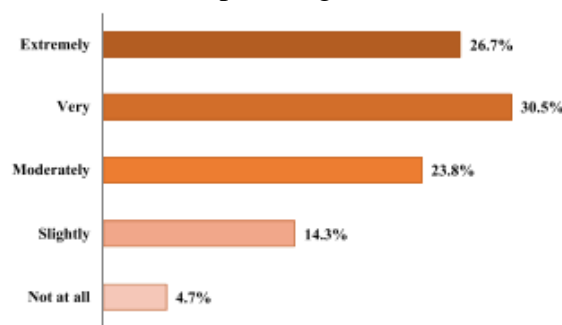


Fig. 5. Impact of the COVID-19 on seafarers' mental health and wellbeing.

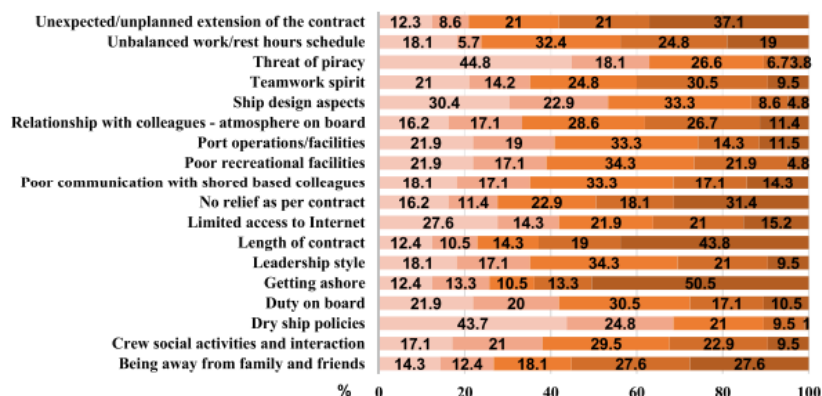


Fig. 6. Factors contributing to mental health most affected by COVID-19.

Figure 6 displays how respondents perceived COVID-19 to impact several elements of mental health and wellbeing. Getting ashore (64%), the length of the contract (63%), being away from family and friends (55%), an unexpected extension of the contract (58%), no relief as per contract (49%), and an unbalanced work and rest hours schedule (44%), were all cited as factors that had a moderate to severe impact on COVID-19.

## Conclusion

It is often believed that seafarers are exposed to both physical and psychological hazards on the job. It is crucial to be able to recognize the warning signs of depression in order to get someone the care they need, especially since one can never predict when suicidal thoughts may begin to surface. Because of the intangible nature of mental diseases like depression, seafarers often dismiss them. According to the results, very few respondents felt they needed professional help. Although more might be done, it's encouraging to see so many people invested in finding solutions to the problem of depression among mariners. During the pandemic, more than half of the sample (58%) said that their mental health and welfare were impacted severely or significantly due to COVID-19. What parts of respondents' mental health and wellbeing do they feel are most impacted by COVID-19?

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