

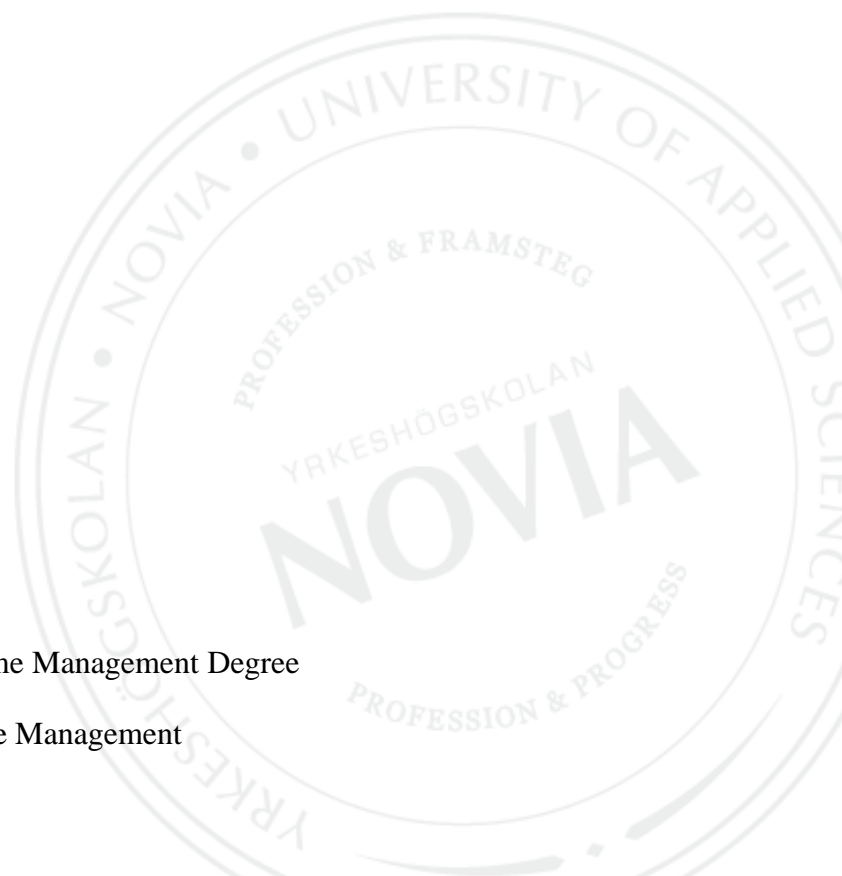
DEPRESSION, THE UNSPOKEN THREAT TO LIFE AT SEA AND MEASURES TAKEN TOWARDS THE FIGHT OF DEPRESSION

Ngonga Kamga Armand

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Author: Ngonga Kamga Armand

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Supervisor(s): Ritva Lindell, Peter Björkroth

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Abstract

This thesis aims to study depression as a health hazard and how to deal with depression among sea farers at sea. My primary concern on this topic is creating awareness on depression and how we can spot signs and symptoms of depression among seafarers both at sea and ashore as well as ways of dealing with depression among sea farers. In addition, I will dive into some of the causes of depression and solutions to such causes to ensure a healthy crew. What can be done by shipping companies as well as the crew onboard.

This study consists of both a theoretical and practical part. The theoretical studies include research carried out identifying the signs and symptoms of depression among seafarers onboard, what causes depression and how we can deal with depression onboard. The practical part of this study was a survey conducted in the form of a questionnaire to seafarers as well as interviews conducted onboard among multinational crews.

The research is divided into different parts. The first part talks about depression onboard, how it affects day to day life and performance onboard, causes of depression how to identify people suffering from depression through the various signs and symptoms of depression while the final part tries to identify or come out with solutions to the problems raised in the first part of this research such as measures taken towards the fight of depression onboard and how to reduce the rate of depression among seafarers.

Key language: English

Keyword: Unspoken Threat, Sea and Fight

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1. INTRODUCTION

Depression onboard affects performance in so many ways, it causes a feeling of sadness and/or loss of activities once enjoyed. The shipping industry is not just a mode of transportation, it is a place of work and home to millions of men and women working as seafarers. Working and living at sea has never been easy and studies of seafarers' mental health has revealed that more than a quarter of seafarers show signs of mental health and due to some reasons, they won't ask for help.

Seafaring is a demanding profession with its own risk where working long hours with little sleep is considered normal, this leads to burnout, fatigue, and stress. A lot of seafarers must face possibilities of workplace accidents though that is a common scenario with other professions as well, the possibility to gain access to medical care is very limited to what is onboard the ship. Seafarers are also expose to several health complications due to their nature of work and apart from that, seafarers spend most of their time travelling at sea apart from their families and home which can last from a couple of weeks to months at a time and this can be very emotionally taxing for both the seafarers and their families.

Although seafaring is demanding and comes with its own risk, it is equally as fun. People get depress every day, doing different things, but how do we manage this situation in our industry? In the course of this study, I will also look at possible solutions on how to deal with depression on a day-to-day basis onboard and what can be done to reduce the rate of depression in the maritime industry as well as help people open when they feel depressed.

1.1 BACKGROUND OF THE STUDY

I found this subject very interesting and important as for the past years studying in this field, I have had the opportunity to work with different people from different background with each person having something to say about the subject matter. Depression in the maritime industry has to an extend been normalize by the crew and they don't see much

reason to talk about it either of fear of being considered weak therefor, more than a quarter of seafarers show signs of depression.

Studies have shown that human errors are the number one cause of accidents at sea constituting 75 to 96% of all incidents and this also ranks as the top cause of liability and loss of life at sea (Frith, 2017). mental health is an integral part of physical wellbeing at sea and its importance cannot be over emphasized. A healthy crew is not only important for the crew but also to ship owners, insurance, and the environment.

According to a study carried out by the International Charity Sailors' Society and Yale University on more than 1000 seafarers, 26 percent of seafarers said they had felt depressed or hopeless on several days over the previous two weeks. Over half of the seafarers who reported symptoms of depression said they had not asked anybody for help. Around one-third said they had turned to family while only 21 percent said they had spoken to a colleague despite spending months on the ship with them. (LINES, 2018)

Studies have showed that there is a significance of loneliness and stress as contributory factors that can lead to depression or in extreme cases suicide which has been extensively investigated in other settings. According to the World Health Organization (WHO) more than 300 million people suffer from depression globally, making it the leading cause of disability worldwide. In terms of suicide, at least 800,000 people commit suicide every year making it the second leading cause of death for 15-29year old.

Findings from this study was particularly interesting to me as it made me think of ways and methods, we can use to identify symptoms and those signs that will suggest a crew member is suffering from depression, what we can do about it as well as why they do not feel comfortable talking about depression just as another sicknesses. An interview I conducted with the captain and chief officers onboard some Finnlines vessels with multicultural crew shows how working conditions affect crew members of different ethnicity differently and how differently they will react to situations onboard.

1.2 AIM OF STUDY

The aim of this study is to create awareness on the subject matter and minimize the risk of seafarers being exposed to situations onboard that makes it easy for depression to set. Signs and symptoms, we should watch out for, the different types of depression and what it means to us as seafarers, what has been done to manage the situation among seafarers and what more should be done and how well we can manage these situations as a sector and the role of the IMO to fight depression or deal with depression in the maritime sector.

1.3 METHODOLOGY

This research is done using both the quantitative and qualitative research methods, the quantitative method was there to differentiate based on age, ranks, department, and longevity in service. Getting people to talk about depression is very challenging especially in a “mancho” industry as ours, I had to use questionnaires that were open-ended and anonymous as it gave opportunities for more honest and open answers as people could answer without fear of being identified with the stigma linked with depression as being weak. I also conducted a couple of interviews which made the subject matter more interactive as I was also able to get involved in a discussion with the interviewees and get their opinion on the subject, the downside here was the interviewee never really opened-up on the though I interviewed more experienced seafarers.

Theoretical studies about depression onboard, how it affects seafarers in order to better understand how we can better deal with depression at sea is an important part of this studies and as such, I had to broaden my scope of study and so did not only study materials on the subject matter from the maritime sector but I had to venture into other sectors as well to understand to a greater effect how it impacts my sector in relation to other sectors and how depression is viewed in the maritime sector.

2. DEPRESSION

2.1 DEFINITION

Depression can be defined as a common and serious medical illness that negatively affect how you feel, the way you think and how you act. It causes feeling of sadness and/or loss of activities once enjoyed. Depression can go as far as causing several physical and emotional problems and can negatively affect a person's ability to function at work and at home.

In other words, depression can be said to be a state of mind where one feels bad and anxious and find whole life desperate. A depressed person finds it difficult to do somethings once enjoyed and they become easily tired. Decision taking is often difficult as well as concentration on studying or reading. Depression is second only to schizophrenia in first and second cases of admission into mental Hospitals in the united states and outside recorded cases, it has been estimated that the prevalence of this mental illness is 5 times greater than that of schizophrenia. A systematic survey on the prevalence of depression in a sharply defined geographical area carried out more than 40 years ago, indicated that 3.9 percent of the population of more than 20 years were suffering from depression at a specified time.

Depression like any other illness or disease affects performance and how you react and feel as well as think. it is a medical illness that causes feelings of sadness, loss of interest in activities once enjoyed, decrease ability to function both at work and home. Depression always comes along with several physical symptoms and as such can be quickly spotted (identified)and treated. A depressed person onboard does not only pose a danger to themselves, but to the entire crew. Working onboard entails we trust our coworkers enough to sleep comfortably, trusting the ability and the mental health of the officer on watch.

2.2 FACTORS INFLUENCING DEPRESSION ONBOARD

Depression starts in situations where we experience great changes in life. These changes may start of as incidents while they slowly gravitate to root causes. People experiences different situations every day and some of this situation turns to affect us differently than others. Some of the causes of depression will include:

2.2.1 Environmental factors

Sometimes, depression will come from situations in which we have to face great challenges but have limited resources to execute these challenges, our work environment and what goes on around us. Example of environmental factors that might lead to depression may include:

- I. **Fatigue:** The IMO guidelines define fatigue as: “A reduction of physical and/or mental condition, resulting from physical stress. It may impair al-most all psycho-physical abilities including power, speed, reaction time, coordination, decision making, and/or emotional balance” (et al, Molino, Fasanaro, & Amenta, 2012) Fatigue can arise from so many different reasons, with the obvious ones being results of long working days, Insufficient crew member and as such, work load becomes too much for the crew numbers and the consequently, long working days with , insufficient number of personnel. Some causes of fatigue onboard will also include.
 - Inadequate qualification of the subordinate crewmembers.
 - Work shifts and unpredictability, which are typical features of life at sea, may lead to fatigue and therefore to a high risk of accidents, also of psycho-emotional nature.
 - Longer voyages have been determined to be more stressful especially during the nighttime.

Risks related to fatigue are significantly higher in non-officers than in officers, and in younger seafarers compared with the older ones (aged more than 35 years) (et al, Molino, Fasanaro, & Amenta, 2012). The International Transport Federation (ITF) study “Seafarer fatigue: Wake up to the dangers” reports the results of a survey in which the global number of hours at work was very high. A quarter of the ITF sample stated that they worked on average more than 80 hours a week. Fatigue on waking was frequently reported by seafarers, it increases gradually from the start of the shift, and is more evident during the first week at sea. This situation worsens life quality onboard and compromises the health and wellbeing of seafarers. All these factors can lead to

depression among seafarers. An isometric and dynamic effort associated with work under heat stress conditions may be regarded as a decisive causative factor for a sudden cardiac event. It is important to apply measures referring to at least three different types of fatigue: objective demands, subjective stress, and health problems reported. A national cross-sectional study on seamen of two different countries, Lithuania and Latvia, demonstrated that factors associated with psycho-emotional stress are essentially depression and disorders of sexual life (et al, Molino, Fasanaro, & Amenta, 2012).

- II. Limited recreation activity:** Entertainment comes in different ways and it helps the mind distress and relax, recreation in the form of entertainment and sport are somethings that seafarers have very little time for, as they have little free time, and this may increase stress. Studies have showed that the lesser people participate in leisure activities in this case recreational activities, the greater the chances of depression. Research on emotions indicates that emotions have a variety of effects that can either strengthen or weaken your psychological capacity. The lack of leisure and recreational activities among some sea farers increases the risk of depression onboard.
- III. Loneliness:** Making the decision to work at sea means you accept the positive and negative perks that come along with the profession. With that said, seafarers are one of the most isolated groups of people as they have very little contact with people given that they spend days to weeks or even months at a time at sea without any physical contact with the rest of the world before getting to port. Social isolation is a major cause of psychological problems and has caused a decrease in the number of seafarers in Western countries. Isolation can lead to despair and depression some situations and in vulnerable individuals it has been reported to be a cause of suicide. Loneliness is also very much associated with distance away from the family and home for long periods of time. Being away from home is one of the main demotivating factors identified by seafarers. A study conducted on 134 seafarers showed 59.7% of them consider “long separation from family” as the main stress factor onboard. This stress levels significantly increase especially when some family members are not well or when we can establish contact back home. (et al, Molino, Fasanaro, & Amenta, 2012)
- IV. Sleep deprivation:** Sleep has a big impact on mental health especially on the quality of sleep. When you don’t have a good quality sleep, it can greatly influence your energy level, motivation, and emotions. Small levels of sleep deprivation over a continuous period can affect your happiness or even show signs of clinical depression such as

feeling persistently sad or empty. People with insomnia have greater levels of depression and anxiety than those who sleep normally. They are 10 times as likely to have clinical depression and 17 times as likely to have clinical anxiety. The more a person experiences depression and the more frequently they wake up at night as a result, the higher the chances of developing depression. (SleepFoundation.org)

Having proper sleep as a seafarer is very vital as they are not only important to our physical health but also our mental well-being. Seafarers without proper sleep do not only suffer the risk of depression, but also tend to make more mistakes and suffer from more accidents.

- V. Multiculturalism and Nationalism:** It is now becoming very common to see ships with multicultural and multilingual crew but still, there is little information on the effect this has on seafarers' depression and suicide rate. One study found that "cross-cultural communication on board tends to be more successful in terms of interaction and outcomes when seafarers are culturally close and less successful when they are culturally distant from each other. Cultural distance between seafarers is a major determinant of stress and leads to failure to communicate and build relationships on board. An important indicator of cultural distance is variations in pronunciation and usage of Maritime English". It is during the "cultural adjustment period" that seafarers may experience "mental pressure and psychological constraint" due to not knowing the cultural boundaries with his/her crewmates", and that speaking one's mother tongue could produce suspicion among non-speakers of that language. This may contribute to loneliness and unsatisfying social relationships, potential risk factors for depression. Not being able to speak same language or understand one's culture might lead to misunderstandings and potential conflicts between people of different cultures. Although such topics as language and culture is relevant to understanding seafarers' depression and suicide, their actual impact has yet to be investigated. (Mellbye & Carter, Seafarers' depression and suicide, 2017)

2.2.2 Medical Examination and Health Assessments

Like any other profession, ship owners or companies try to ensure that workers before being employed or joining a vessel for the first time, undergo Pre-employment medical examination (PEMEs). These are examinations intended to assess whether the seafarer is fit for work. If after this examination they are considered fit for work, they are then issued a medical certificate that qualifies them to work onboard the ship. This is mandatory for all seafarers to complete before signing a contract for a voyage. The issue here is; these

examinations is primarily focused on examining the employee's physical health and as such, it is less likely to find mental problems like depression since mental problems are difficult to detect. The PEME despite its many positive features, is not suitable for detecting mental health issues such as risk of depression and suicide with issues also arising from the fact that they exist conflict of interest between seafarers and their employers. This is so as employers want fit and healthy seafarers on their ship, while seafarers will always want employment regardless of their health. (Mellbye & Carter, Seafarers depression and suicide, 2017)

2.2.3 Gender

The maritime sectors have been considered by many to be a male dominated field and this is backed by statistics as women only constitute 1-2% of the world's total seafaring population. According to Survey carried out by the women's health and wellbeing, it shows anxiety, stress and depression are women seafarers' second biggest reported health issues, after back/joint pain. Being a woman in such a male dominated field often comes with a lot of responsibility and expectation as women seafarers often are always expected to prove themselves and as such must work twice as much to get the same respect or will be considered weak and not professional. Women seafarers also report gender related discrimination that range from distorted expectation of their work capacity to sexual harassment, and this makes it harder for them to find or even retain employment as employers in this case are prejudice and think it's better for crew moral not to have women onboard as it might cause sexual tension and Jealousy. With what most women have to go through, coupled with the environmental factors, it is understandable why there is a higher level of depression among women seafarers as compared to other woman in less male dominated occupation.

2.2.4 Deep-Sea and Social Isolation

Deep sea voyages are often highly associated with social isolation the longer you spend at sea, the more you get isolated from your love ones. In explain why 87% of suicide between 1967 and 2002 happened on deep sea ships, Roberts and Marlow argue that "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" (Mellbye & Carter, Seafarers depression and suicide, 2017). Social isolation is not a diagnosis but an objective reality to which seafarers are particularly prone to. Close friendship, emotional and personal conversations have never been common at sea where social life is rigidly

hierarchical and senior ranks feel the need to maintain social distance. For deep sea going vessels, the crew gets separated from the family for months, with sometimes very little opportunities to communicate with their love one and this contribute to the feeling of social isolation. Though in recent years, the advancement in technological know-how has helped to reduce the effect of social isolation, most deed-sea going vessel except for passenger ship still don't have access to good internet onboard. Shore leave is needed to give seafarers the taste of normal life at shore where the get to socialize and meet different people and this helps to feed future story telling back onboard but according to a study, 76% of seafarers reported never or rarely ashore with most of this number being officers.

2.2.5 COVID 19 And Its Effect on Seafarers

With the outbreak of the novel corona virus disease, the world had to shut down due to its high rate of infection and death. This disease affected people worldwide without consideration of class, color, ethnicity, as in this case line of work. Not only did people suffer physically from this pandemic, but there were also instances of psychological imbalance.

The rate of psychological imbalance is heightened among people working on enclosed space, the rate of anxiety and depression among seafarers increased during the corona virus pandemic as most of these seafarers were trapped onboard vessels unable to return home worsen by travel restrictions. This made a lot of seafarers stuck onboard and as such had to extend their contracts for longer period. The enormity of the seafarers' problem was described by the UN General Antonio Guterres as "a humanitarian and safety crisis" (Webster, December 13,2020). On like other shore base professions, depression onboard is drastically different as the likelihood of accidents and other illnesses will increase drastically. A recent survey conducted by marine benefits found out that of those who participated in the survey, 72 per cent reported a delay in crew change due to the pandemic with 69 per cent reporting their delay was up to 4 months, 5 per cent reported their changes took about 8 to 10 months. Being away from family for such long period of time in the middle of a pandemic has been an issue most people especially seafarers have been subjected to and as such, feel helpless when something happens, and they cannot be there due to travel restrictions. This has been the situation of the world in 2020 and like other sectors, seafarer's mental health has been affected drastically.

2.3 SIGNS AND SYMPTOMS OF DEPRESSION

Most people know the signs and symptoms of depression such as feeling worthless or hopeless, losing interest in activities we enjoyed doing and losing sleep. Despite these being some of the significant signs and symptoms of depression, there are, however, many signs and symptoms of this illness that some people are not particularly aware of, some may argue it is largely due to the stigma associated with the illness while others may think it's just the general lack of interest concerning the illness. Some people go through depression without even knowing why they feel the way they feel and this may last for a while before they seek for help. It is worth noting that identifying these symptoms early enough gets that person the help they need in time and this can even save their life. Some very common signs to look out for include.

- Having a tough time sleeping.
- Appearing upset and on the edge.
- Losing concentration, forgetful, feeling confused and indecision.
- Low self-esteem and guilt.
- Having a hard time balancing workload and personal life
- Constantly feeling anxious
- Easily triggered and as such gets into a lot of arguments and conflict.
- Hates company so turn to be isolated, withdraws from people and quieter than their usual self.
- Having suicidal thoughts and may sometimes express them in a conversation.
- Lack of energy and easily irritated.
- Mental and physical tiredness
- Drug or alcohol abuse
- Feeling of hopelessness and feeling stuck
- Loss of interest in things previously enjoyed.
- Changes in appetite or weight. Some people turn to overeat when they feel depressed while others turn to lose their appetite.

- Low self-esteem and sense of worthlessness; this is a difficult sign to deal with as the person going through this feel they are not enough, and their life is not enough which may lead to suicidal thoughts.

Identifying these symptoms is very important and the first step in getting the help needed in dealing with this illness. Someone suffering from depression does not need to exhibit all the signs listed above before seeking medical help. Experiencing a number of these signs should already be enough to ask for help.

Depression is not a sign of weakness; it is an illness and should be treated as such. In a culture that is male dominated depression is hardly talked about as statistics shows that depressed men than women are less likely to acknowledge feeling of hopelessness or worthlessness. They rather express these feelings in “socially acceptable” ways like alcohol abuse, aggression, easily irritated and even isolation.

2.4 TYPE OF DEPRESSION

Depression is an illness that does not only affect you mentally, but it can affect you physically as well as your relationship with your colleagues, family, and friends. The importance of mental health as an integral part of physical wellbeing at sea cannot be over emphasized. Human errors constitute 75% to 96% of incidents at sea and this ranges from environmental incidents to financial and loss of lives. Human error is said to have contributed to 84% to 88% of tanker accident, 75% of fire explosion 79% of towing vessel groundings and 89% to 96% of collisions. (Chan, Hamid, & Mokhtar, september 2016). Seafarers need to be in good mental state to be able to function properly. Understanding depression as an illness and the various types of depression is an important solution base approach to the subject as we become more aware of our surrounding and how to approach such issues onboard. There are different types of depression which we most at times do not understand. The common types of depression include.

2.4.1 Major Depressive Disorder (MDD)

Major Depressive Disorder order wise known as MMD is a type of depression that is often characterize by prolong period of intense sadness from either a traumatic experience or illness and often occurs in episodes. MMD is also referred to as clinical depression and its impact goes beyond mental effects but also physically through appetite loss and sleep. MMD is one of the most common forms of depression and though some people go through

without seeking help, others learn to cope and manage it. This form of depression can be treated with proper management and medication.

There are some signs pertaining to this type of depression and to be diagnose with MDD, 5 or more of these signs and symptoms must be identified in your behavior. These signs include.

Having a feeling of worthlessness about things you normally will not feel that way about.

Lack of energy and constant feeling of tiredness.

Changes in appetite or weight. Some people turn to overeat when they feel depressed while others turn to lose their appetite.

Suicidal thought

Alcohol and drug abuse

Indecision and lack of concentration

Feeling of restlessness, difficulty falling asleep or oversleeping

Easily irritated and loss of interest in previously enjoyable activities.

Despite all these symptoms, an exact cause of this MDD is not known a combination of stress and genes make some people more likely than others to be affected, however, traumatic experiences like childhood abuse, alcohol and drugs, medications such as steroids can trigger MDD (Kerr, September 24, 2020)

2.4.2 Persistent Depressive Disorder (PDD)

Persistent Depressive Disorder otherwise known as dysthymia is another type of depression, not as severe as MDD but last longer. Most people suffering from this form of depression have a hard time knowing exactly when they started feeling the way they do as most suggest they have been feeling that way for a very long time and as such turn to attribute feeling that way to their normal daily live and feel they go in and out of depression from time to time. This type of depression last for very long period with a couple of weeks or months where the person has no symptoms and then it starts all over again.

PDD has similar signs and symptoms as MDD but key to this form of depression is the duration of the depression. With PDD, there is loss of motivation and dis engagement from life, tiredness, indecisiveness, pessimism, and low self-esteem.

PDD left untreated may develop into MDD as people with persistent depressive disorder have a high chance developing MDD. (Harvard Health Publishing, March, 2019)

2.4.3 Bipolar Disorder

This is a type of depression with abnormal behaviors that can be characterized as mania. This form of depression is also referred to as manic depression. This form of depression causes extreme mood swings with emotional highs called mania or hypomania and lows called depression. During low mood swings otherwise known as depression, there are characteristics of low energy, sadness, hopelessness, and loss of enthusiasm for things you love doing. In emotional high situations, the person becomes extremely energized and very irritated which can affect sleeping habits, judgment, and ability.

Common symptoms associated with this form of depression include an increase in energy level and agitation, very jumpy and weird behaviors, very talkative and easily distracted with racing thoughts. (Mayo Clinic, Jan. 31, 2018)

2.4.4 Seasonal Affective Disorder (SAD)

This is a form of depression that happens with changes in season and may occur because of an alteration in the body's daily natural rhythm, mostly occurring during winter because of a shortage of sunlight as we get less sunlight during the day but goes away during summer months. This form of depression is often difficult to diagnose and may go for long periods unnoticed. SAD is more common in places further away from the equator such as the north pole or south pole and can be treated using light therapy to offset the lack or loss of light during this period. In addition to light therapy, constant exercising can also help as it reduces stress and anxiety which are two factors that contribute to SAD. Characteristics of this form of depression include feeling hopeless or worthless most of the days, feeling guilty, sluggish, and agitated, having frequent thoughts of death or suicide, low energy, lack of sleep, drastic changes in appetite or weight, lack of concentration and loss of interest in activities once enjoyed.

2.4.5 Atypical Depression

This is a form of depression with its own specific features that are not usually associated with depression. It affects the way to think and behave with other people and can lead to physical and emotional problems. This type of depression is two to three times more common in women and is not uncommon in men as well. It affects your day-to-day life

and make you feel as giving up on life. Signs and symptoms of this type of depression include an increase in appetite or weight gain, very emotional and sensitive to rejection or criticism, insomnia, poor self-image. This type of depression is very challenging as people suffering from them do not always appear as suffering from depression due to its temporary episodes as someone suffering from atypical depression get to feel a lot better in the event of good news and slip back into depression just moments after.

2.4.6 Situational Depression

This is a stress related type of depression that is short term and develops mainly after a traumatic experience or series of events that makes it hard to adjust to your everyday life such as the loss of a loved one, illness, relationship issues, and work-related problems which may include working in dangerous waters. This type of depression is also known as reactive depression and signs and symptoms of this depression include hopelessness, very emotional always accompanied with periods of crying, insomnia, trouble carrying out work related duties, loss of appetite, lack of desire for once enjoyable events, lack of focus, constantly worried and anxious and the feeling of sadness. (Pietrangelo, 2018)

2.4.7 Premenstrual Dysphoric Disorder (PMDD)

This is a severe form of premenstrual syndrome (PMS) that happens every month among some women before the start of their menstrual cycle. It occurs one or two weeks before the start of your period and has some very severe symptoms which might impact their personal and working life. This is a form of depression that is caused by extreme physical pain and can cause devastating emotional and psychological effects as some people have suicidal thoughts when this period is approaching. Signs and symptoms of this type of depression include extreme moodiness, always very irritated and angry, food cravings, sadness or hopelessness, anxiety or tension, extreme fatigue, bloating. (Pietrangelo, 2018)

2.4.8 Perinatal Depression

This is a general term for prenatal depression which happens before the baby is born and postpartum depression which happens after the baby is born. During pregnancy, there is a lot of hormonal fluctuation that can affect a woman's moods by triggering changes in the brain. Its symptoms can be as severe as those of major depression, and it is more common among women who have suffered from depression in the past and women who lack support. Signs and symptoms of perinatal depression include but not limited to sadness, anger or rage, exhaustion, thoughts of self-harm or/and the baby, exhaustion, anxiousness, difficulty being a care giver to both yourself and the baby. (Pietrangelo, 2018)

2.4.9 Depressive Psychosis

This is a form of depression characterized by hallucination and delusion. It is referred to as psychosis and people going through this type of depression lose touch with reality.

Someone experiencing both events of delusion and hallucination is said to be suffering from psychotic depression or major depression with psychosis. This type of depression can cause serious physical and mental symptoms and it is estimated that about 20% of people suffering from major depression also have psychotic symptoms. Other than normal depression symptoms, someone suffering from this type of depression also experiences psychotic symptoms such as hearing voices, seeing imaginary things, smells, and believing things that are not there, other symptoms include sadness, guilt, hopelessness, and irritability. These delusions and hallucinations can sometimes cause people to be suicidal and as such should be given enough attention. (Black, Nov 4, 2020)



Figure 1: Symptoms of Depression (<https://www.typeathought.com/c/depression-counseling>)

2.5 PREVIOUS RESEARCH

The mental wellness or state of mind of a seafarer is of utmost importance especially if they are involved with navigation or positions of responsibilities onboard. This is so because not only are they responsible for their lives, but they are also responsible for the lives of the crew, the vessel, its passengers, the environment, and cargo. Depression is a sensitive topic whose existence is perceived differently by different people. According to a study that was presented at Sailors' society of wellness at sea conference on March 16

London, more than a quarter sea farer out of the 1000 sample size showed signs of depression and of this number, almost 45% reported that they had not talked about it with anybody. Of those who talked about it to someone, a third of this number had rather talked to family and friends about it though being miles apart while only 21 percent had spoken to a colleague onboard despite working together for months on the same vessel (gCaptain, March 28, 2018). This study also found that the length of a seafarer's contract influences their health as they reported being away from family and friends for long periods of time impacted their health negatively.

On trying to combat depression, an effort by the Sailors' Society in its wellness conference brought together some stakeholders in the maritime industry to give their take on depression at sea and how it can be combated and among those who shared their stories was Dan Thompson a 29-year-old navigation officer from London who had to take time off due to depression. "Our industry is more 'macho' than many others. The attitude is to toughen up and get on with it. There is a fear of talking about it openly, of losing your job," Dan Thompson.

Thompson also anticipated the number of people suffering from depression being higher than those admitting to it base on experience. Work contract was one of the main causes as it has a proportional relationship with seafarer's state of mind as long contracts will demand the seafarer be away from friends and family for a long time. The job as he said sometimes was very demanding accompanied by sleep deprivation and pressure of the job.

The deputy CEO of the sailors' society Sandra welch also made some identified some of the conditions of a seafarers' life which include in her word "the toughest conditions of any workforce" such as the long time they spend onboard with unfavorable conditions such as noise, heat, storms, isolation in small living spaces and sometimes food onboard.

(gCaptain, March 28, 2018)

This conference was aimed at throwing light to this topic and ways of making life at sea favorable for the seafarers who are the backbone of the industry.

Another study was carried out by Yale University on a sample of 1572 seafarers from all over the world working on different vessels under different flags and from different ranks. About a quarter of the sample size had suffered from depression and 17 percent had also suffered from anxiety while 20 percent of those who suffered from depression had contemplated suicide or causing harm to their body. This study identified some factors for

being connected with the feeling of depression and suicidal thoughts. These factors include but not limited to

- Exposure to violence or threats of violence
- Prevalence of pre-existing medical conditions such as cardiac disease and sleep disorders
- Lack of Job satisfaction and motivation.
- Lack of adequate training that affects the seafarer's confidence.
- An insensible work environment with lack of interpersonal relationships among seafarers.
- Ill health.

The nationality of the crew member has a part to play when talking about violence and bullying at work. Seafarers from eastern European countries and the Philippines were discovered to be 4 times more likely to experience or report an incident of this magnitude than seafarers from Western Europe.

Despite this topic not being popular in this sector as most people would rather keep to themselves as they believe talking about depression is a form of weakness and they rather not show that part of them, Dave Heindel, the chair of the seafarers' trust thinks the more mental health is talked about in this sector, the more the stigma surrounding the topic is reduced. The findings from this study led the reports lead author Dr Lefkowitz to personally brief the ITF Seafarers' committee to on the findings of this study. Findings from such a study is very important and should be used everyone in the shipping industry.

The lives of sea farers is characterize by lots of travelling and generally known to be tough, having all of its challenges to deal with, the study examined some difficulties faced by seafarers and the challenges it has on their mental health, the study included a couple of recommendations for employers, companies, trade unions, maritime training institutes and P & I clubs. These recommendations are aimed at helping these institutions to better manage the situation that contribute negatively to seafarer's mental health. These recommendations include.

- Taking steps in ensuring proper training for cadets and pay attention to complaints made and make improvements to complaints procedures.
- Taking steps to reduce the stigma associated with mental health within the work culture.

- Putting appropriate measures in place in recognizing, identifying, and addressing the need to intervene and properly address situations of workplace violence which may come in the form of verbal abuse, abuse of power, intimidation or racism or sexism.

The survey for this study was a product feedback gathered from who has spent over three months of sea voyages and this survey was active promoted for three months and it attracted 1894 participants of which 1572 was selected. (Dr Lefkowitz & Slade, 20 November 2019).

As per the final report by ITF SEAFARERS' TRUST & YALE UNIVERSITY, a survey was conducted to determine the various kind of mental health issues prone to seafarers and this was carried out with the help of questionnaires to determine the prevalence of depression and anxiety among seafarer's population and other associating factors contributing to this. It was based on a 2-week period and the questionnaire responds was scored on a 0 to 25 score basis with higher score implying more severe and lower less severe. Any score from 10 and/or above corresponded with a clinical diagnosis of depression. The questionnaires for this study were based on a PHQ-9 questionnaire which was also incorporated with the five-question World Health Organization Well-Being Index (WHO-5). The questions also included the 7-Item Generalized Anxiety Disorder Questionnaire (GAD-7). These questions assess for the presence of anxiety, with scores of 10 or above correlating well with generalized anxiety disorder.

Though the findings from a questionnaire cannot be 100% accurate as it may mis some people suffering with depression and anxiety as well as incorrectly miss diagnose or incorrectly suggest some individuals are suffering from depression and anxiety disorder, it is however very important as it gives us an insight of what is happening in the sector and as such how we can put on a good fight against depression and anxiety disorder. Based on this survey, the prevalence of Depression and anxiety were 25% and 16%. Among those who participated and completed the survey, 212 people scored from 10 and above on the GAD-7, making it a 16% while from 1238 of those who took both surveys for anxiety and depression, 163 (13%) had both depression and anxiety, 148 (12%) had depression but not anxiety, 39 (3%) had anxiety but no depression, and 888 (72%) had neither depression nor anxiety. From the 26% depression prevalence percentage, 200 (16%) moderate depression, 83 (7%) moderately severe depression, 35 (3%) severe depression.

Ranking period of ultimate lows based on the seafarers mode, it was realized that the periods with better moods included the seafarers last days onboard and first days back home while worst mood included their last days home and their first days back on the ship (beginning of their voyage) or during extended periods of stay onboard.

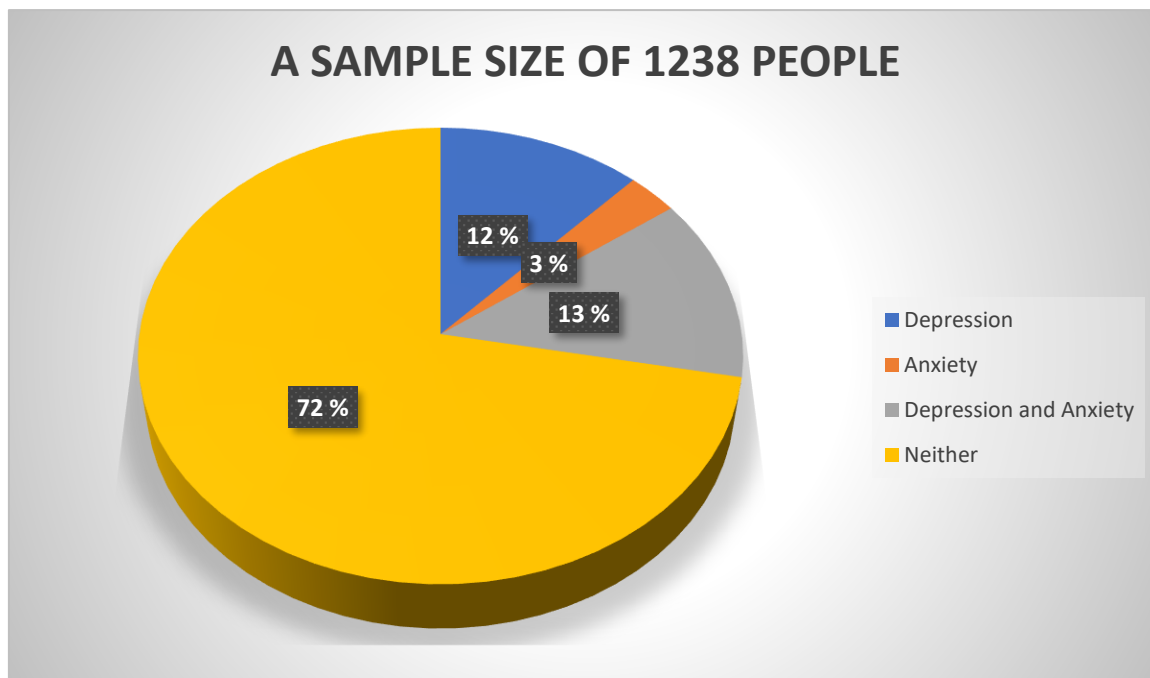


Figure 2: Distribution of Depression and Anxiety in seafarers Population based on the PHQ-9 questionnaire. (Lefkowitz & Slade, October 2019, p. 15)

Seafarers' depression rate according to this study was said to be higher compared to a 6% rate in the German general population study. Seafarers are known for having a higher depression rate when compared to other sectors. This study further showed a higher percentage or prevalence of depression among female seafarers and younger seafarers ranging between the ages of 18-35. The higher prevalence of depression in female seafarers than their male colleagues come because of different stress factors that they face when compared to their male colleagues. The industry is very male dominated, and this presents some challenges to the female seafarer.

As per Seafarer Mental Health Study Final Report, suicidal thought becomes higher among young officers and ratings when compared to captains/masters, higher frequencies of depression among seafarers being new officers, deckhands and seafarers with less experience as compared to well experience seafarers with a lot of sea going experience. Also, they exist a high frequency of anxiety among deck hands and galley workers compared to engineers.

A classification of rate of depression and suicidal thoughts according to vessel type also identified container ships as having the highest frequency of suicidal thoughts when compared to other vessels with bulk carriers and tankers having the lowest level of suicidal ideas and anxiety. Most seafarers showing signs of depression associated it with lack of experience as they most likely report having to do task in which they need more training for and workplace violence and exposure to other threats. An analysis of factors influencing depression or low mood swing included reasons such as:

- Isolation from family and friends,
- Supervisor high demand
- Length of contact
- Lack of sleep due to irregular schedule on some vessels.

This study also emphasized on the issue of asking for help as seafarers do not ask for help usually due to the stigma associated with depression. Out of the sample population of seafarers with depression a question on the aspect of asking for help was asked with correspondent being able to choose more than one option, only 25% asked for help from their co-worker despite spending most of their time onboard with other seafarers. 38% talked to their friend about their mental state of mind, 36% to family, 35% talked to nobody about it while a small percentage of about 20%, 16%, and 8% of seafarers asked professionals like doctors, therapist, and chaplain respectively for help (Lefkowitz & Slade, October 2019).

Seafarers spend most of their time onboard and depending on the vessel and voyage route, they are most times cut off from the world due to lack or limited internet connection. In such situation, seafarers who feel depressed and can't ask for help from their colleagues tend to keep everything bottled up which in some cases may lead to suicidal thoughts, It should be noted that about 20% of depressed seafarers reported suicidal thoughts or self-harm two weeks prior to taking this survey.

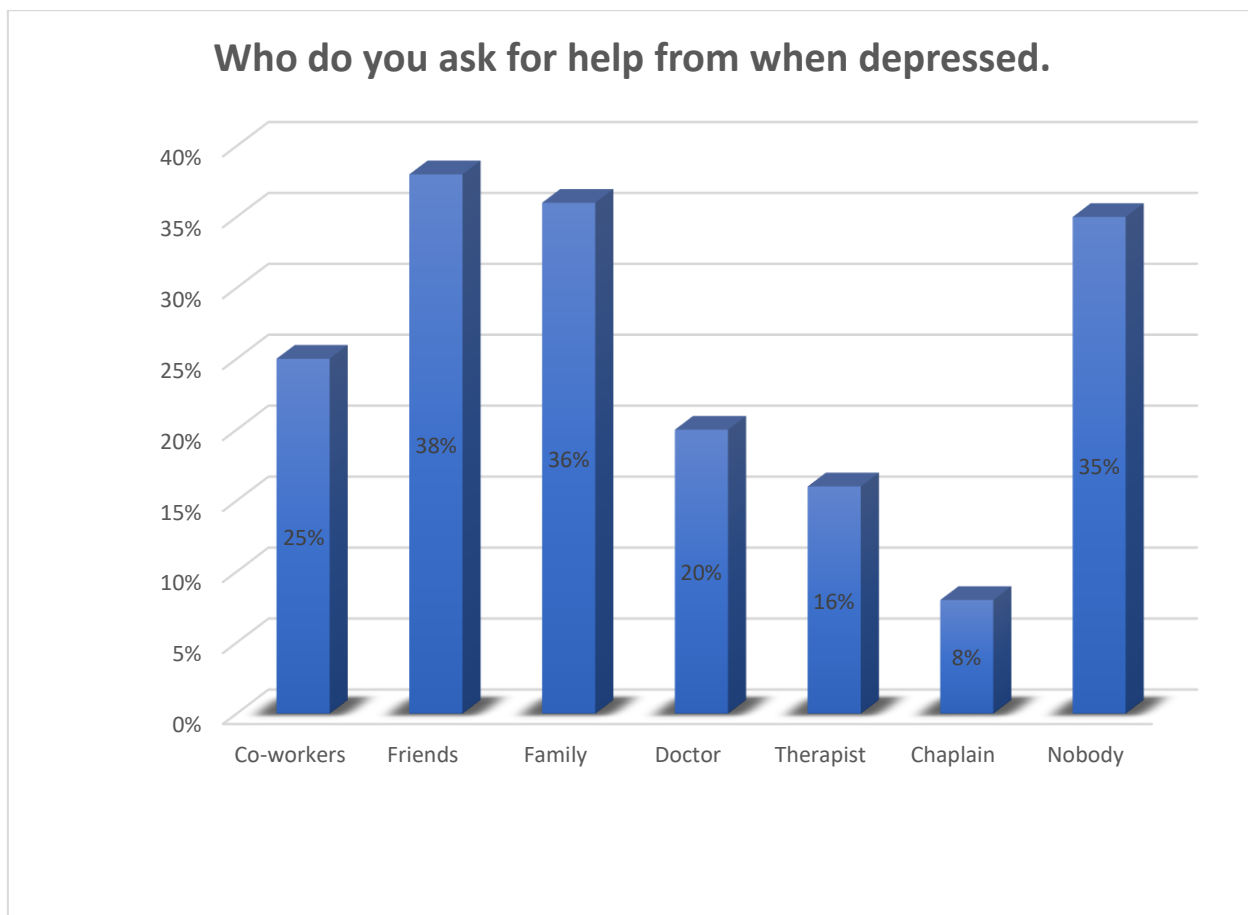


Figure 3: Distribution of who seafarers ask for help when feeling down or depressed. With the possibility of choosing more than one choice, Percentages summation exceeded 100 (*Lefkowitz & Slade, October 2019, p. 17*)

This research was aimed at assessing determinant for depression, anxiety and suicidal ideation among seafarers working onboard a vessel and these determinants was grouped under medical, demographic, occupational and vessel environment determinant.

The baseline for medical conditions included:

- History of high cholesterol
- Liver disease
- Sleep disorder
- Cancer
- Diabetes and
- Hypertension.
- Vessel environment variables in this case included but not limited to:
- Vessel type,

- Work-environment and cultural questions in which consisted of influence over work decisions, performing task which require additional training, ability to set work pace and how much the company cares for its workers by actively seeing into complains made by workers concerning cases of improper conduct no matter the rank and taking appropriate measures to deal with them.
- Registry type.

Demographic variable included: age, region of origin, nationality, and gender. There was also occupational variable that included: shift, rank, tenure, and worksite.

Statistics of Gard's data from 2010 to 2019 shows a declining number of deaths and injuries onboard especially from 2013 onwards which shows a significant growth in the physical health sector meanwhile mental health and suicide stays fairly the same over the past 10 years, there are 65 death each year with 32 cases of mental health and an average of 4.6 suicide and this number do not reflect missing seafarers which may also be counted as suicide. The distribution of mental illness is not only limited to a certain age group, but all age group are vulnerable to it.

2.6 MEASURES TAKEN TOWARDS THE FIGHT OF DEPRESSION.

A priority to start with, Depression is a topic that had been and will be under scope for as long as it exists. Mental Health and Well-being of personnel onboard vessels is a topic of interest for the IMO, the Finnish government and numerous international organizations including but not limited to ISWAN, Shipowners and so on.

2.6.1 International Seafarers' Welfare and Assistance Network (ISWAN)

International Seafarers' Welfare and Assistance Network "ISWAN" is sponsoring and implementing the Mental Care Campaign under Seafarer's Health Information Program (SHIP), and thereby releasing Guidelines for Mental Care Onboard Merchant Ships to briefly address the different risks, recommendations and potential remedies for crew members, ship operation personnel and policy makers or executives. ISWAN Network is supported by shipowners, mutual Insurance association and a member of the International Group of P&I Clubs. ISWAN plays a major role in studying and finding practical solutions

for numerous projects related to mental health and wellbeing onboard. Countless efforts had been made since day 1 and hence, their contribution on the respective topics is recognized globally. They have some points on mental care onboard which includes:

- Those who suffer from reactive depression and stress can easily resume work after receiving treatment as they do not pose a safety risk even though they might be exempted from some demanding tasks. In situations of more severe depressive conditions that not only posed danger to the seafarer's life but those of their colleagues and vessel, the seafarer can only be allowed to come back to work after lengthy periods of evaluation and recovery with no relapses.
- There is the availability of welfare worker in ports whose services are available to any seafarer who finds themselves feeling depressed, stressed, or anxious while at sea. Being able to get in contact with friends and family lessen the effect of isolation and loneliness.
- A close eye should be kept on someone suspected of suffering from depression and having suicidal thought. It becomes very difficult in a real scenario to do and as such, confinement in own cabin is advisable and the seafarer is to remain in under supervision, other precautions should also be taken such as removal of all substances that might be used to cause bodily harm from the cabin such as sharp objects, medicines and other objects like strings and ropes.
- Increasing the quality and competence of seafarers by ensuring a there is a clarity of roles and responsibilities that tells the seafarer what their responsibilities are both on the bridge and off the bridge, this goes a long way to boost confidence as they become more verse with their task and comfortable doing it.
- The level of morale onboard: This plays a very big role on the mental state of seafarers. Crew competence are being affected by the degree of moral onboard as individual may be reluctant to "go an extra mile" during watch or work on deck if the morale is poor. Moral onboard is greatly influence by communication amongst crew which has to do with the level and quality of information sharing. A very good and optimal information sharing means the information share is good and up to date information and that increases competence of seafarers and their moral onboard. A factor that also influences competence of seafarers is training as fully trained seafarers tend to have more confidence in doing their duties and additional task which when properly executed also act as a moral boost. The level of

collective experience on different vessels and different routes also boosts the quality of the crew and the crew moral. This collective experience comes in the form of training from working on different types of vessel and different routes with different crew. (ISWAN NEWS, 2020)

2.6.2 International Maritime Organization (IMO)

IMO's contribution is revolving around Human rights, or seafarer's rights to be specific, adopting and forcing conventions such as MLC - Maritime Labor Convention 2006, International Labor Standards on Seafarers from the International Labor Organization (ILO), Human Rights at Sea (HRAS), International Transport Workers & Federation (ITF Seafarers) and Seafarers & Rights International (SRI) which is an independent body adopting similar principles and values as the IMO in the respected topic.

On the 25 of June 2018, the IMO joined the growing momentum within the shipping industry to address important issues of seafarers' wellbeing. The day of seafarer Campaign (25th June): #SupportSeafarersWellbeing. The IMO Secretary-General Kitack Lim in his annual message said the "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" (IMO, 25 JUNE 2018). This day encourages seafarers to share their views and experiences through an online survey which they are then analyzed and presented to the IMO council. The campaign also has a positive message where seafarers get invited to share their positive experiences onboard and this can uplift their spirit and give the positive side to working onboard. The IMO secretary general urges every seafarer to join and be part of the campaign as by sharing their experiences, they help bring the importance mental health deserve. Seafarers also talk what a "#GoodDayatSea" looks like and to enter the IMO/ISWAN photo competition sponsored by The North American Maritime association (NAMMA).

2.6.3 The Finnish Government and other Finnish organizations

The Masto project was developed to reduce depression-related disability and depression itself by the Ministry of Social Affairs and Health. Its primary functions are to foster good practices and well-being at work, help in the prevention of depression, ensure good level of treatment and rehabilitation, ensure a smooth return to work and ensuring the reduction in the number of disability pension due to depression (World Health Organization Regional

Office for Europe, 2012). The program targets the whole working age population and its main content include:

- Promotion of well-being and mental health at work
- Activities aimed at preventing depression.
- Early recognition and treatment of depression
- Rehabilitation and return to work.

Work related stress has its effect on the human mind and body and this has been well studied in Finland and other European countries. Finnish researchers in Finland or in collaboration with others identified a well-established association between work stress and disease, gotten from epidemiological studies. These diseases included:

- Elevated risk of mental disorder among workers with demanding jobs such as seafarers with their jobs having some major characteristics like time pressure, poor working atmosphere, low control of work schedule.
- Increase risk of burnout with the high job demand, poor work atmosphere and lack of sufficient staffs on some vessels.
- Elevated risk of being pensioned due to depression related work disabilities.
- High risk of coronary heart morbidity and mortality is high among workers with stressful jobs or work environment.

Mental health services are being organized in Finland by municipal authorities, hospital districts, private service providers and different kinds of organizations that provide help for mental health problems to seafarers. The availability of healthcare centers, occupational healthcare, specialized psychiatric care, psychotherapists, and other organizations provide support to seafarers struggling with depression. The implementation of healthcare services by this public and private structures differs significantly between cities with larger cities having more service providers and versatile services.

Seafarers suffering from depression should first inform the authorities onboard who makes arrangement for them to get the help they need ashore; the primary help comes from their healthcare centers or from occupational healthcare centers and the level of these services available to seafarers depend on the agreement between the shipping company and the occupational health care. In situations where the occupational healthcare does not provide psychiatric treatment, the occupational healthcare physician can write a referral to

corresponding treatment provided by public healthcare. Some municipalities do have trained nurses who are referred to as depression nurses and they are trained to help patients suffering from depression. Though some municipalities do allow patients make appointments with their psychiatric polyclinic directly, it is still preferred to use a referral from the occupational healthcare physician.

Psychiatric polyclinic does not offer frequent, long-term psychotherapy which means patient must buy these services from private psychotherapist. In such situations, the referral from a physician entails a need for psychotherapy which gives the patient the possibility to apply for financial support for the therapy from the social insurance institution of Finland (KELA) (mieli (Mental Health Finland), (n.d))

2.7 PROPOSALS FOR REDUCING THE DEPRESSION ONBOARD

Being a seafarer comes with a lot of opportunities, but these opportunities come with a lot of responsibilities and challenges. There are many different factors that affect the quality of life of seafarers at sea. The maritime industry is the backbone of international trade and its workers are the life blood of the industry. The deputy CEO of the International Maritime Charity Sailors' Society Sandra Welch commented on seafarer's mental health as she pointed out that seafarers face some of the toughest conditions of any workplace as they spend months on end at sea with some of the toughest conditions. Deriving ways of keeping them happy help reduce the rate of depression in our profession. Some proposed solutions include.

1. Improving mental health literacy and skills onboard. By improving mental health literacy onboard through training and programs that support leadership, it becomes easy to identify signs of depression when they start presenting themselves. Workers mental wellbeing is very important for an organization in achieving their goals and getting them the help, they need might just save their life and that of the crew as well.
2. By taking measure that ensures adequate and uninterrupted sleep hours for seafarers, it reduces fatigue and associated depression. Seafarers should also be encouraged to do exercises at consistent basis. Improving seafarer's health through better access to

healthcare which includes optimizing medical treatment procedures onboard and access to physician through telemedicine. This may lead to improve mental health.

3. Properly addressing cases of workplace violence or threats to violence can go a long way in reducing the rate of depression onboard. Workplace violence reduction interventions may be key to reducing mental health at sea as workplace violence is a huge contributor of depression at sea. A study conducted by ITF SEAFARERS' TRUST & YALE UNIVERSITY showed region of origin was significantly associated with exposure to threats of workplace violence or workplace violence. With seafarers from the Philippines/pacific regions and eastern European countries being 4 times more likely to report incidents involving workplace violence than western European countries. Some proper steps in addressing workplace violence will include.
 - 3.1. Defining what violence in seafaring means and how to measure it.
 - 3.2. Involving key stakeholders in identifying sources and strategies to reduce workplace violence.
 - 3.3. Support research in the intervention and evaluation, with dissemination of results to governing bodies, shipping companies, registries, and unions. An increase in job satisfaction may also result from interventions to reduce violence in the seafaring workplace.
4. The first step into solving a problem is identification. Identifying that something is wrong is taking the first step in the right direction. Companies should take steps towards addressing the huge difference in the happiness level of seafarers when they are onboard and when they are at home.
5. Companies and stakeholders should recognize the importance of mental health in shipping industry and how it affects performance and wellbeing at sea. Knowing that different vessels affect seafarer's health differently base on schedule, time duration at sea, the crew and other factors affecting seafarer's mental health, will pave the way for type specific based solution in addressing these issues.
6. Shipping companies and stakeholders should recognize that fighting depression at sea is a joint effort and that they play an important role in addressing issues such as unhappiness, recent-onset anxiety, and depression among seafarers.
7. Ensuring that there is free and unlimited internet connection onboard available to seafarers. This is specifically very important for deep sea going vessel that spend

weeks on end at sea, being able to keep in contact with family and friends is a priority and help reduce the level of unhappiness at sea. Going for days without internet connection make seafarers very unhappy as they cannot communicate with their family and friends back home.

8. Recognizing that individuals are different and have different interest which may be culturally motivated as well so having a variety of recreational activities onboard will help reduce depression at sea. As a minimum, one or more of the following activities should be encouraged onboard: basketball, swimming, squash in addition to a couple of the following activities: table tennis, barbecues, board games, dart, karaoke, bingo, and cards.
9. Recreational facilities should also be provided onboard that allows individuals to get alone time working on their minds and body. A minimum of a gym should be provided onboard with at least 3 equipment where seafarers can blow off steam. In addition to a gym, at least 2 of the following should be available to seafarers, a book and DVD library, satellite TV in cabins, a sauna, and library of interactive video games.
10. Contracts should be made in a way that the balance out with leave time for all ranks in a ratio of not worse than 2:1 and a maximum of 6 months onboard and not more. It should be made in a way than seafarers have enough time to spend with family and friends.
11. Policies should be introduced that properly tackle issues like harassment and bullying.
12. Going out of the ship from time to time is helpful as it allows the seafarer to see new places and helps them relax. Shore leave should be provided at regular bases to all seafarers irrespective of ranks.
13. Sleep is very essential and vital to seafarers especially officers as they take on huge responsibilities and must be well rested so comfortable mattresses and furnishing should be a provided to help seafarers get proper rest.
14. Self-help guidance on improving mental resilience should be provided to all seafarers.
15. Seafarers are limited to what is available onboard in terms of food so with such limited option, there should be varied good quality food with proper allocation per person to ensure they are well fed (Sampson & Ellis, 2019).
16. De-stigmatize mental health within the company culture and encourage seafarers to easily talk about mental health and ask for help when needed.
17. Enhance support for cadets to ensure they are properly trained to reduce the pressure that comes along with the job and ensure proper complaint channel and make improvement to complain procedures.

2.8 METHOD AND PROCEDURES

In this Thesis, depression, the unspoken threat to life at sea and measures taken towards the fight of depression, through understanding what depression is, how it affects life at sea and what can be done about it. It ventures into a survey on seafarers' repatriation from iosh article on Seafarers mental health and wellbeing. The final survey and question from the questionnaire were the result of a 1-year visit on different vessels in which the survey was constantly improved over several interaction with over 50 seafarers over the course of the study from different vessels, nationalities and ports. This survey was conducted on a passenger vessel, RO-RO vessels and a RO-RO/PAX vessel and it was made up of 20 questions answered by over 55 seafarers for which respondent reported as active seafarers from different backgrounds, nationalities, vessel types and ranks. The survey included descriptive characteristic such as vessel type and route, age, and marital status. Company response to depression and measures as well as several open-ended questions that gave respondents the opportunity to express themselves and give their opinions on the subject matter. Responses from each questionnaire were analyzed individually. There was a couple of yes or no answer type questions that directed respondents to the next section. It is important to note that not every questionnaire was fully answered as some questions were left unanswered by some respondent which is therefor presented as unknown or not answered. Table and figures are used to further explain results from this survey and draw attention to what needs to be done and where attention must be focused. The survey also included questions which was focused on finding out the respondent history of depression that is, if they had been previously diagnosed with depression. Suicidal ideation was also part of the questions asked as respondent were asked if they had ever experience or witnessed a scenario of suicide onboard or someone being suicidal.

A more detailed approach on how seafarers interact or relate with other seafarers when it comes to sharing how they feel was also a core part of the thesis as it was out to see who the seafarers turn to when they feel depressed.

Giving the stigma surrounding this topic in the maritime sector, research directed towards finding information on depression of seafarer was extremely difficult so a system of distributing questionnaire to seafarers and when answered can be left in the deck office was the approached used in this study as it eliminated face to face contact with respondent and open up an avenue for respondent to answer without fear of being regarded as weak.

Over 75 questionnaires were distributed but only 55 came back answered and among the 55 answered, not all the questions were answered.

A couple of interviews were conducted with a few captains and chief officers including an officer from the Philippines and the aim of this interview was to get a deeper view on the topic from more experienced seafarers with both navigation and administration background.

In selecting the sample population, I decided to go with seafarer with at least a year working experience of sea going days, a mixture of male and female seafarers, a combination of nationalities and ranks and age groups.

2.9 RESULT AND INTERPRETATION OF RESULT

The finding of the survey was based on vessel characteristics, age, sex, ranks, and characteristic involving other factors influencing depression. Seafarers' demographic is presented in table 1 with 55 respondents of which 48 are men constituting 87% with a very small percentage of the respondent being female 7(13%). Age distribution of the sample population showed 18(32.7%) of respondent where between the ages of 18 -30 years, 22(40%) between the ages of 31- 40 and 15(27.3%) of respondents between 41 years and above. Seafarers were also classified according to ethnicity and region of origin which explains factors influencing depression such as types of contracts which is directly linked to length of stay onboard showed 20 respondents constituting 36.4% were from the Philippines, 15 (27.3%) of respondents from Finland, 9(16.4%) from Estonia 5(9.1%) from the United states of America and 6(10.9 %) respondents from other countries.

Seafarers from various ranks were part of the survey ranging from the master(captain) to the cook. 30 respondents of the survey constituting a majority of 54.5% was from the deck department while 18 respondents constituting 32.7% was from engine and 7(12.7%) was from the galley. Breaking the sample size in to ranks showed 6 captains responded to the survey making 10.9%, 23 officers including engineers making up 41.8% and 19 of the respondent responded as ratings including bosuns making up 34.5% while others constituted the rest 12.8%. Dividing the sample population base on sea going experience also helps throw more light to the topic, 26 people responded having 10 or less years sea going experience making up for 47.3%, 19 responded as having between 10 to 20 years of

sea going experience making up 34.5% and the 10 responded as having 21 or more years of sea going experience making up the rest 18.2%.

The survey was conducted on different kind of vessels which explains the different level of pressure and kind of expectation other than the generally stated task for seafarers on all vessels, 33 of the respondents were working on Ro-Ro vessels making 60%, 7(12.7%) from Ro-Ro/Pax, 7 respondents from a bulk carrier constituting 12.7% and 8(14.6) respondent working on a passenger vessel.

Relationship status play an important role as a determinant of seafarer's level of happiness, respondent had to either respond as married and/or living together, in a relationship and living separately or single. Those married and/or leaving together accounted for most of the respondent 30(54.5%), People in a relationship but living apart made up 15(27.3%) while those single constituted 10 people (18.2%). There was a higher of depression among those married and/or living together than every category followed by those in a relationship and less among single people.

The survey included open response questions centered around what makes seafarers happiest onboard and respondent responded with activities ranging from social activities, loan activities, shore leave, people onboard, communication through internet, having signal onboard, the job satisfaction and others. In other light, what makes seafarers saddest onboard can be viewed as factors influencing depression onboard which ranges from recreational issues, family and home issues, the vessel and activities related to onboard stay, long period of no internet and other activities.

Parameters	Characteristics	Total number of seafarers (55)	
		Number	Percentage
Gender	Male	48	87
	Female	7	13
Age	18 - 30	18	32.7
	31 - 40	22	40
	41 and above	15	27.3
Ethnicity	Philippine	20	36.4
	Finland	15	27.3
	Estonia	9	16.4

	U.S.A	5	9.1
	Others	6	10.9
Workstation	Deck	30	54.5
	Engine	18	32.7
	Galley	7	12.7
Ranks	Captain	6	10.9
	Officers and Engineers	23	41.8
	Ratings including Bosun	19	34.5
	Galley	7	12.7
Sea going experience	Less than or equal to 10 years	26	47.3
	11 – 20 year	19	34.5
	21 years and above	10	18.2
Vessel type	Ro-Ro	33	60
	Ro-Ro/Pax	7	12.7
	Bulk Carrier	7	12.7
	Passenger	8	14.6
Marital status	Married and/or living together	30	54.5
	In a relationship and living apart	15	27.3
	Single	10	18.2

Asking someone if they have been depressed in the past is a very personal question and base on the industry perception of the topic, it becomes difficult to get a truthful reply. I had to expand the questions on this subject to get more willing reply as respondent had to choose if they had been depressed onboard in the past or had experience someone suffering from depression. 15 people responded as yes making 27.3%, 16 people (29.1%) responded as no while 24 people (43.6%) responded as they do not know. Not being able to identify if a colleague is suffering from depression can be because of no knowledge of signs and symptoms of depression or not paying attention to other people onboard. Among those who had suffered from or seen someone suffering from depression onboard, only 3 asked for help or talked with a colleague onboard about it making 20% while 5 talked to family

making 33.3%, 4 people talked to a friend making 26.7% and the rest 3 people talked to other people constituting 20%.

People onboard generally have different routines on how to relieve stress or what they do to cheer up. There is no stated way of blowing off steam and asking seafarers what they do to lighten their mood differs between individuals and included activities such as communicating with friends, families and other surfing the net, mental resilience exercises that include but not limited to reading the bible, being alone and meditating, going through videos and photos, Interaction with others onboard and other activities such as watching tv, playing videogames, drink, smoke, shore leave, rest/sleep and reading.

Most seafarers think 2020 had a high number of depression cases compared to previous year, based on an interview conducted, most of the officers from the Philippines I talked to, reported an extension in their contracts due to the pandemic. Some of them had to stay onboard for about 10 months and this is not good for the mental state of mind of the seafarers, being constantly in the state of uncertainty when going to new port and getting people onboard, seafarers fear for their lives and the fact that shore visit is considered unsafe make mobility very limited. There is also the issue of worry and fear for family and friends back home.

A lot of people downplay depression because they don't consider it a real threat to human life, some others think it is a sign of weakness and base on the industry view of the subject, it becomes difficult to open up about it. When asked the question on whether depression can lead to suicide if left unchecked, only 16 persons answered as yes making 29.1%, while 30 people making for 54.5% replied as I do not know, 9 replied as no making 16.4%.

Depression is something that is slowly getting the spotlight it deserves in the industry, most companies are taking measures to address depression as it is being considered like any other sickness and measures taken to address the problem. 38 responded as yes making up for 69.1%, 12 responded as they do not know making up for 20% while 5 people said no feeling a lot more can be done that has not been addressed, this group formed a 9.1%

Sleep deprivation is also a very sensitive issue contributing to depression at sea, sleep deprived seafarers showed more signs of depression among the 15 people who reported depressed or knowing someone who suffered from depression onboard, 11 reported being sleep deprived, sleeping less than 6 hours a day making 73.3% while 4 reported sleeping 6 to 8 hours a day making 26.7%. The total survey of 55 seafarers showed on an average

23(41.8%) seafarers sleep for 6 or less hours a day, 29(52.7%) reported sleeping for more than 6 to 8 hours a day while 3(5.5%) reported sleeping more than 8 hours a day.

Seafarers had a lot to say on what could be done to reduce the rate of depression on board, for starters, ensuring that there is uninterrupted internet connection onboard to ensure communication with friends and family was very important. Ensuring that complains made by other seafarers are investigated properly to fight against bullying, and other forms of verbal intimidation onboard. Also, the nature of contract should be balanced out as some internationally seafarers especially from the Philippines are sometimes expected to spend up to 10 months at sea. A couple of seafarers also requested for counseling service or a professional therapist provided by the company who they can talk to. The provision of positive feedback on good work an attitude by the captain and others in administrative position serve as a form of motivation and respectful interactions with subordinates is also very important.

Finally, Seafarers where being asked when the feel saddest onboard and a majority of 28(50.9%) reported when they are leaving home and joining the vessel, the first weeks turn to be the hardest, 21(38.2%) reported middle of their contract as they are already missing family and friend and are over the excitement on living onboard 6 reported at the end of their contract making up for the rest 10.9%.

Percentage of seafarers depressed onboard or had witnessed depression onboard.

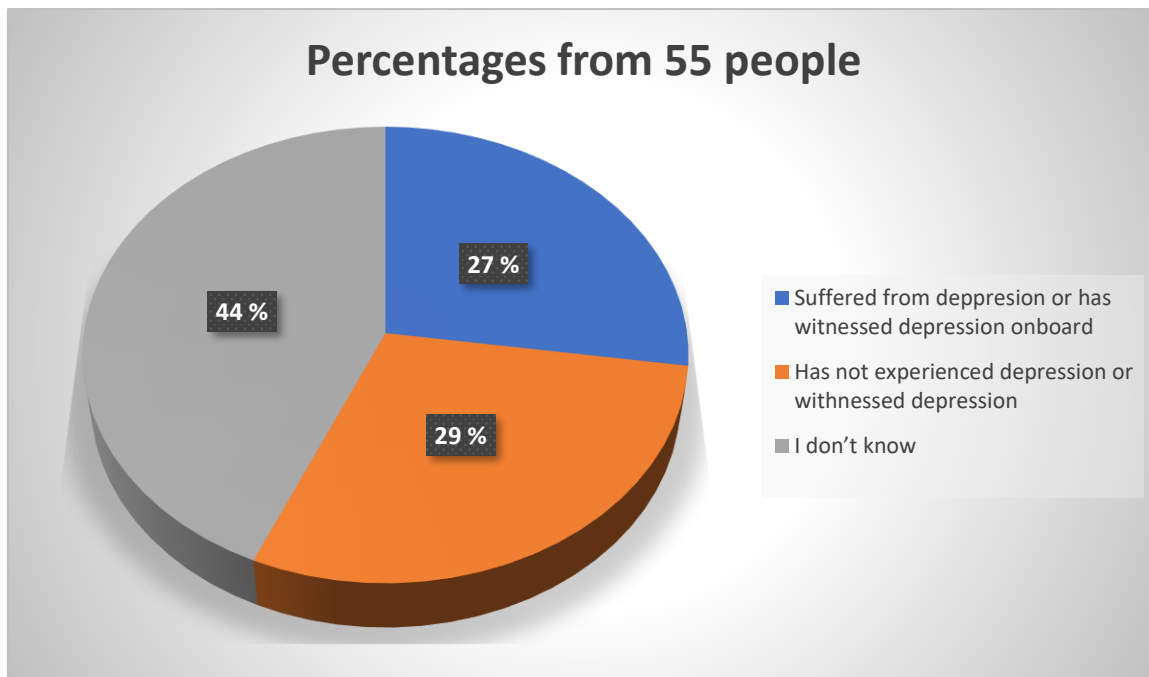


Figure 4 Distribution as seafarers as percentages of seafarer who have suffered or witnessed depression onboard.

Seafarers likely to ask for help and who they turn to

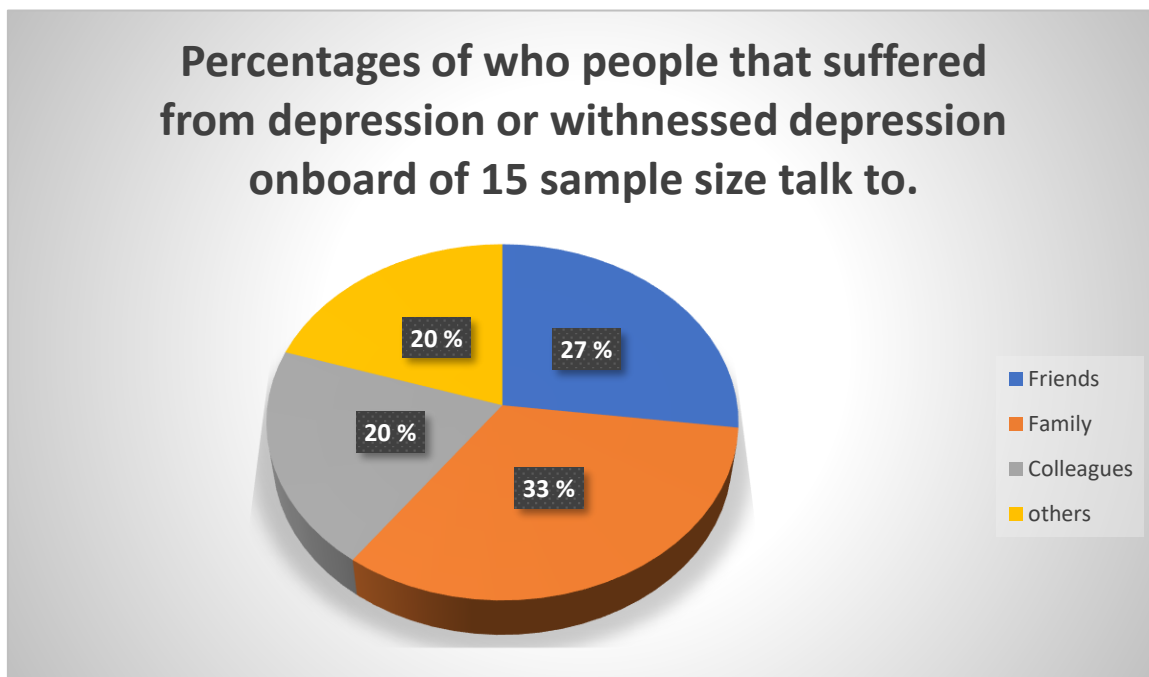


Figure 5 Percentage of the category of people depressed seafarers are likely to talk to.

Seafarers mood onboard based on the period

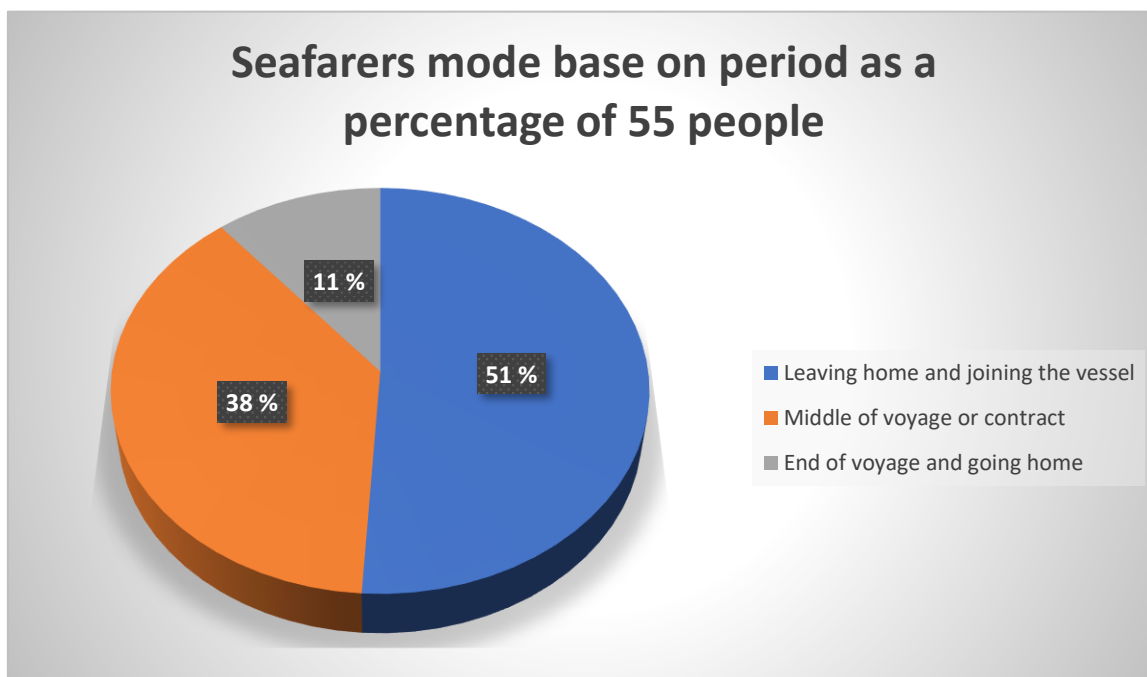


Figure 6 Mood distribution of seafarers based on period.

3. CRITICAL EXAMINATION

This study was carried out to identify depression as something that affects seafarers but is really not talked about in the industry, examine what the IMO, the government, national and other international organization have done to fight depression among seafarers, and suggest possible solutions for the fight against depression at sea. The sample size was carefully selected consisting of a few captains, chief off, officer, deck hands, bosun, and the galley worker. Talking of depression onboard does not only refer to the officers, but everybody also working onboard is at risk and as such I had 55 respondents who are workers onboard from different vessels, the survey was conducted during the practice phase of my studies. I made questionnaires which I distributed on any new vessel I join for my practical. The result from this study is very relevant as in was conducted on the field and answered by people who are living that reality and not just some random people.

I also used a lot of articles which had been reviewed by peers and a study conducted by Yale University on a sample of 1572 seafarers from all over the world working on different vessels under different flags and from different ranks. A study presented at Sailors' society

of wellness at sea conference on March 16 London, with a sample size of 1000 seafarers, and finally, a final report by ITF SEAFARERS' TRUST & YALE UNIVERSITY. These articles gave me firsthand information backed by studies conducted on over 2500 people combined. This combine research gave me an insight on areas to tackle on my questionnaire which was answered by more than 50 people whose experience as seafarers is very important and vital to my result, presentation, and conclusion.

Also, the presentation of this thesis into sections with each section base on creating awareness, presenting actions taken and suggestion solution achieves the goal for the study. The study is aimed at making a seafarer's stay onboard conducive as it highlights the fact that seafarers do not talk about depression and how to remedy that. The study is aimed at encouraging not discourage.

However, some questions were presented to respondent without detailed explanation of what it means, example of such a question is "Have you ever been depressed onboard or seen someone suffering from depression", with this question, respondents to give an answer base on their definition and diagnosis of depression which might not be the case. Though they exist different types of depression, self-diagnosis which can as well be wrong diagnosis is a very possible scenario that can happen and as such, though the result is very relevant, answers to this question may not be very reliable.

4. CONCLUSION

Though there is no evidence of worsening situation of depression at sea, it can be agreed that the rate of depression in the maritime sector is higher when compared to non-seafarers. Knowing the different types of depression and their signs and symptoms onboard can be a life saver for some people as we never know when the suicidal ideation starts creeping in so being able to identify these signs can get them the help, they need is an important skill to have onboard.

The interest put in place by the various stakeholders in addressing the issue of depression among seafarers is very admirable though more can always be done concerning the subject matter. Many employers do not see the importance and necessity to invest in resources that proactive measures that help reduce the pressure most seafarers go through sometimes.

Living onboard for long periods of time can be very challenging so making life easy for seafarers can help relieve some of the pressure. Although seafarers have proven to be very resilient and cope very well with the challenging environment onboard, they are more likely to feel happy at home than at sea. The work environment at sea is not a bad one, but it can be better seafarers identified a couple of things onboard that can be done to make their time onboard more favorable and these include ensuring there is constant internet connection onboard, shorter periods of time onboard, bigger crews and more sociable activities, provision of mood raising recreational activities such as shore leave, barbecue parties and sport facilities.

Seafarers themselves do not take mental illnesses like depression seriously as it is mental and cannot physically be seen. Based on the survey, the barely mentioned the need of counselling. The “macho man” attitude of the industry is being criticized by the IMO and most shipping companies as the day of seafarers encourages seafarers to talk and share their stories and experiences.

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Appendix-1 Survey on Seafarers depression at sea

QUESTIONNAIRE ON DEPRESSION AT SEA

1. **Gender:** Male Female
2. **Age:** 18 -30 31-40 41 and above
3. **Country of Origin:** Finland Philippine Estonia U.S.A
 Others
4. **Workstation:** Deck Engine Galley
5. **Rank:** Captain Officers and Engineers Ratings and Bosun
 Galley
6. **Sea going experience:** Less than or equal to 10 years 11 -20 years
 21 years and above.
7. **Vessel type:** Ro-Ro Ro-Ro/Pax Bulk carrier Passenger
8. **Marital Status:** Married and living together in a relationship and living apart single.
9. **What activity makes you happiest onboard:** _____

10. **What thing makes you saddest onboard:** _____

11. **Have you ever been depressed onboard or have you seen someone suffering from depression onboard?**
 Yes No I don't know
12. **If 11 is yes, who did you talk to:** Friends Family colleague
 Others
13. **If you feel down or depressed onboard, what do you do to lighten your mood?**

14. **Do you think depression increased in 2020 compared to previous years?**
 Yes, No I don't know
15. **Do you think depression if unchecked can lead to suicide?**
 Yes, No I don't Know

16. If your answer to 14 is yes, What do you think is the cause?

17. Has your company identified depression onboard as an issue of concern?

Yes, No I don't know.

18. How many hours of sleep do you get a day?

4 to 6 6 to 8 8 and above

19. What do you think Shipping companies can do to reduce the rate of depression onboard?

20. When do you feel saddest on board? When joining the vessel

Midway into your contract When leaving the ship