

Seafarers' Wellbeing or Business, a Complex Paradox of the Industry

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ABSTRACT: The research is an insightful exploration into what contributes to the deterioration of seafarers' wellbeing. It unveils the determinant factors and their impact on wellbeing, further exploring the perception and awareness levels of the maritime society on the issue. Moreover, the effectiveness of main regulatory instruments to address seafarers' wellbeing is analysed and discussed.

Qualitative methodology based on semi-structured interviews and content analysis was applied. Twenty-six active seafarers of different nationalities and working on different types of vessels, one pilot and 11 influential maritime stakeholders of the industry were interviewed.

The literature review shows that wellbeing can only be fully understood when considering its physical, mental and social dimensions, and emphasizing its significance the workplace. However, the study indicates that despite high awareness of such dimensions and determinant factors of wellbeing, the psychosocial working conditions provided by shipowners onboard ships are not in full compliance with a holistic view of wellbeing. Moreover, shipping companies lack promotion and training on awareness of mental health and wellbeing issues onboard ships and how to handle them, as the existing safety management system is based on incident and accident reduction principles. Results expose excessive workload and lack of sleep (as a result of reduced manning) as major contributors to fatigue further causing deterioration of seafarers' wellbeing. Other revealed factors include long contracts, lack of shore leave, unavailability of recreational facilities and internet connection, lack of onboard socialising, fear of job loss and stress/anxiety. The regulatory instrument MLC 2006 sets out basic seafarers' rights but does not fully capture their wellbeing to its fullest.

Seafarers' wellbeing is unlikely to improve unless awareness of the concept of wellbeing is installed within the SMS and all of its dimensions are well addressed in future amendments of the regulatory instruments.

1 INTRODUCTION

Compromises on safety [37], inadequate fatigue mitigation standards [2], and mental health troubles [15, 19], are some of the difficulties commonly reported by seafarers. In the wake of the COVID-19 crisis, the maritime news also reported: "Hunger strikes, crews unpaid and abandoned, rumours of suicides but no obligation to report them. Shipping must be better than this." [5] In response to the crew

change crisis, in February 2021, the Neptune Declaration on Seafarer Wellbeing and Crew Change was signed to protect the welfare of seafarers. On 01 March 2021, Maritime UK launched a mental health pledge including the need to also enhance wellbeing. This recent activity underlines the urgent need to offer decent working conditions to seafarers, promote their wellbeing and respect their right to life [38]. The maritime industry has in place regulatory instruments such as the Maritime Labour Convention 2006, as

amended (MLC, 2006) and fatigue management guidelines from the International Maritime Organisation (IMO). However, what constitutes the psychosocial working and living environment for a ship's crew [28] or what defines seafarers' wellbeing in such an environment are aspects not properly addressed by these international regulatory instruments or national legislations.

Numerous studies reveal that seafaring is still associated with a multitude of mental and physical stressors [21]. A recent study by Yale University reports dangerous levels of depression, anxiety and risk of suicide among seafarers [18]. Another recent study from Cardiff University also reveals that seafarers are at a high risk of depression and anxiety and indicates seafarers' loneliness, lack of shore leave, fear of job loss and separation from family as main contributors to their deteriorating mental health [33]. Lack of sleep and fatigue have been reported as increasing issues among seafarers as per project MARTHA [17]. The Seafarers' Happiness Index, as measured by the charity organization Mission to Seafarers, indicates constant fluctuation of the average score over time, and the latest report (Q4, 2020) has revealed that seafarers' current experiences at sea are the worst in decades.

The results of these studies indicate that the regulations and policies that govern seafarers' wellbeing either lack the intended effectiveness or lack proper implementation or both. This raises a few important questions that the current research aims to investigate: What are the main determinant factors of the seafarers' wellbeing and how they are monitored? How do seafarers perceive their own wellbeing and how is it perceived by other relevant industry stakeholders? What is the general awareness of wellbeing in the industry and how consistent are its supporting regulatory mechanisms?

Finding answers to these questions is not an easy task in a heavily regulated international and multi-national industry. Nevertheless, reinforcing the knowledge of what exactly constitutes seafarers' wellbeing could shed light on the ultimate research question - 'why does seafaring as an occupation suffer from mental health deterioration?' Stemming from this question, this paper first explores through a literature review what wellbeing is and how it can be fully assessed and understood. Secondly, the paper explores the main determinants of wellbeing and investigates the level of its perception and awareness among seafarers and maritime stakeholders. Further revision of the regulatory instruments governing seafarers' wellbeing is also considered.

2 WHAT WELLBEING REALLY IS AND ITS SIGNIFICANCE IN WORKPLACE

The World Health Organization's (WHO) constitution of 1948 defines health as: 'A state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity.' [8] Such a holistic definition connects health to wellbeing and considers mental aspects as an integral part of health; that is, "there is not health without mental health". In

shipping, the certificate of seafarers' medical fitness is mainly issued through examination of physical dimension only, which serves as the evidence attesting to their optimal wellbeing throughout their work contract period. However, the only viable way to maintain seafarers' wellbeing at an optimal level, particularly within the unique psychosocial workplace of the ship, is by not paying attention solely to the physical but also the mental and social dimensions of health [31]. Disregard of any of the three dimensions will lead to failure to maintain the quality of wellbeing [30]. As the International Labour Organization (ILO) declares, the work environment must be safe and healthy, and conditions of work must be in full compliance with the workers' wellbeing and dignity [27]. That is where workplace wellbeing obtains its significance, addressing protection and promotion of health and wellbeing of workers [32]. Therefore, organizations have the responsibility to create a healthy working environment where all possible hazards and risks threatening the wellbeing of the employee are recognized and eliminated through the application of preventive and protective measures [29].

3 MATERIALS AND METHODS

The study has an exploratory and interpretive nature based on semi-structured interviews. The interview questions -structured separately for seafarers and other maritime stakeholders-were based on three main themes: 1) Determinant factors of wellbeing, 2) Awareness and perception of wellbeing, and 3) Regulations addressing wellbeing.

Open questions were used to explore the topics, except for the topic on determinant factors of wellbeing for which 2 additional closed-ended questions on a 5-point Likert scale were used: 'how often are you affected by the factor?' focusing on the frequency of occurrence and 'how does the given wellbeing determinant affect you?' focusing on the intensity of the effect.

Ethical principles were ensured by respecting the anonymity and confidentiality of interviewees by signing informed consent form approved by the World Maritime University. The validity and reliability of the research were ensured by accuracy of the collection, transcription and interpretation of the data. Credibility was ensured by involving seafarers, as well as experts from shipping companies, and on maritime legislation and psychology.

The researcher used non-probability convenience and snowball sampling methods to select the sample of study. As the study is based on grounded theory of qualitative methodology, recommended number of interviews between 20 and 30 was selected (22) in compliance with the theory of saturation. It is when obtaining of no new information was noticed from last several interviews (23) and collected data reached the point of the diminishing returns (4).

LinkedIn was used for reaching out to the potential participants. Video calls on Zoom and Skype were held with the final participants. Both options allowed audio and video recording, which was essential for

further data processing. For the data analysis process, the software ATLAS.ti, version 8 was chosen.

In total 26 active seafarers of 15 nationalities, different ranks, and serving on board different types of vessels, 1 pilot and 11 representatives of various maritime organizations were interviewed within 6 months (January-July 2020). The selection criteria for maritime stakeholders was based on the influence of their voice with regard to ongoing discussions in the maritime industry affecting seafarers' wellbeing. This included shipping companies; NGOs, both representing industry and seafarers' interests; charities; companies offering welfare and health care services to seafarers, and psychologists and medical consultants.

4 RESULTS

4.1 Sample description

The sociodemographic characteristics of the participant seafarers are shown in Table 1.

Table 1. Participants' sociodemographic characteristics – Seafarers

Seafarers' Sociodemographic Characteristics								
	Rank	Area	Ship type	Age	Gender	Years in rank	Sea service	
1	Master	Northern Europe	Bunker supplier	56	Male	7	38	
2	2nd Officer		Product tanker	26		0.9	6	
3			Ice breaker	30		3	6	
4	3rd Officer			33		1	4	
5			Cruise vessel	28	4	7		
6	Junior Officer			24	Female	0.6	0.6	
7	Mate on tugboat		Tug boat	23	Male	0.4	3	
8	Pilot		All types	52	22	22		
9	Chief Officer	Eastern Europe	Oil tankers	30	Male	0.4	8	
10	2nd Officer		Bulk carrier	31		5	12	
11	3rd Engineer		Dredger	26		0.6	5	
12	1st Officer	Cruise vessel	43	10	13			
13	Master	Western Europe	Product tankers	38	Male	6	16	
14			Exp. vessels	49		3	20	
15			1st Officer	Cruise vessel		30	0.3	10
16						29	2	5
17			27	0.3	4			
18	Chief Officer	Aisa	Bulk carrier	32	Male	1.2	10	
19			Chem. tankers	31		3	10	
20			Bulk carrier	53		7	23	
21			2nd Officer	Oil tankers		31	1	8
22			3rd Officer	LPG		30	1.6	3.5
23			Chief Engineer	Bulk carrier		55	12	28
24	Cook		52	30	30			
25	Chief Officer	Canada	Multi purpose	30	Male	0.4	3	
26		C. America	Bulk carrier	30		0.9	10	
27	Able seaman	N. America	Car carrier	27		6	6	

Table 2 shows the sociodemographic characteristics of the participant maritime stakeholders.

Table 2. Participants' sociodemographic characteristics – Maritime stakeholders

Maritime stakeholders' Sociodemographic Characteristics			
	Organization / Company	Designation	Years in position
1	International trade association for the ship management industry	Executive board member	11
2	International trade union	Program coordinator	14
3	International trade association for merchant shipowners & operators	Employment affairs	8
4	Shipmanagement company	DPA / HSSEQ manager	0.1
5	International seafarers' welfare organisation	Project manager	6
6	Maritime charity offering welfare, chaplaincy, mental health support to seafarers	Regional manager	5
7	Private company consulting seafarers' wellbeing	Chief executive	1
8	Management & crises response solutions consultancy firm	Managing owner / Psychologist in maritime sector	1.1
9	Private company offering seafarers mental health support and solutions	Managing director	0.7
10	Non profit organization supporting wellbeing, risk advisory and training	Psychologist	3
11	Private firm providing medical services to shipping companies and seafarers	Medical consultant	3.5

4.2 Determinants of seafarers' wellbeing

Figure 1 shows the main determinant factors of seafarers' wellbeing and their occurrence frequency as experienced regardless of rank or type of ship served on. Most of the factors were found to be interrelated, one leading to the others.

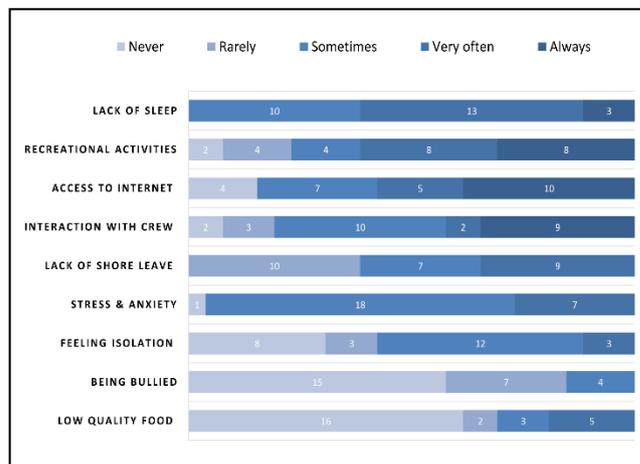


Figure 1. Determinants of wellbeing revealed by the question 'how often are you affected by the factor?'

Lack of sleep (n=16), lack of access to the recreational activities (n=16), lack of access to internet connection (n=15), lack of interaction among crew (n=11) and lack of shore leave (n=9) were identified as major contributors to deteriorated wellbeing as well as causing stress and anxiety among crew.

When lack of sleep is explored more deeply, work schedule, night-time work and stormy weather were named as the main causes of sleep deprivation and fatigue among seafarers. Able seaman-27 admitted: "You can be on your off-work time, but then ship arrives in port and your sleep is interrupted to carry out the operations. It causes a lot of fatigue to me in a

way that I lose my concentration gradually and affects my mood very negatively. Then it develops insomnia because you cannot get back to sleep that easily."

Master-1 stated: "Actions and decisions of crew are vastly dependent on how much sleep they have had being affected by so many various factors such as bad weather or unexpected operations and that's all beyond normality."

Regarding recreational facilities and equipment onboard as requested by MLC, 2006, they were either absent or installed in a limited way, mostly onboard cargo ships. Master-13 explained: "There is a small gym on board, but it is small. I mean, there are a few pieces of equipment in a limited space" and 3rd Officer-22 admitted: "There is basically no gym onboard the ship and those interested only can do exercises in their cabins with onboard manufactured tools."

With regard to internet connection, seafarers find themselves heavily engaged with connecting to shore through the internet, even during their limited rest hours, as a way to cope with isolation and stress. As the results indicate, various companies have various policies on the provision of internet on board. Some have expensive prepaid cards and others unlimited access, but most of the respondents reported lack of access to internet onboard. Two officers commented on the availability of internet on their respective ships: The 2nd Officer-3 noted: "In my last company we had no internet onboard, and it was the main reason for feeling isolated from the world affecting my wellbeing negatively", while the 3rd Officer-4 explained, "There's a WIFI connection onboard, but you have to buy a card for connection, which is quite expensive. Besides, there's only a very limited connection that it offers, only for brief chatting and then data expires very quickly."

Lack of shore leave as the next determinant factor was found to have been experienced by all seafarers, causing them to feel isolated at times. Workload was further named as the main contributing reason to lack of shore leave. Tugboat mate-7 admitted: "During my 5 months long contract I managed to go ashore only four times, mainly because of the workload." Master-14 said: "I have always been limited with going ashore, managed only two times during my last 3 months long contract." And most notably as per 3rdEngineer-11: "Never...I never went ashore during 4 months stay onboard, never had a chance."

Concerning social interaction, most of the respondents (n=18) admitted they would rather sleep than sacrifice some of their free time for extra activities including onboard interaction with one another. 3rdOfficer-4 said: "I try to get rest minimizing onboard socializing as much as possible. Sometimes I am craving for talking with the others, but mostly fatigued and I'd rather go and sleep." "Crew get so tired from work that most of the time all they need is to sleep, no space for socializing but it is not good for wellbeing, because talking and sharing with others are very essential, especially after a very stressful work." (3rd Officer-5).

The exploration of other determinant factors and the extent to which they affected seafarers indicates that long contract, bureaucracy, commercial pressure,

inspections, vibration, lack of mentorship and noise and stormy weather also have extreme negative effects (Figure 2).

Long contract duration (n=18) was found to be a factor causing significant impact on seafarers' wellbeing. Crew nationality and type of ship mostly determined contract duration. Those seafarers from Asia and employed onboard tanker ships experienced longer stays onboard. As the 2nd officer-2 from the product tanker explained:

"Long contract is like a heavy weight on shoulders, you think it's not going to end. I do not feel happy anymore, rarely smile and I have to do my job, which I do not enjoy anymore. It evolves depression, losing interest and appetite for food. I stop socializing with the crew developing isolation, mostly spending time in my cabin."

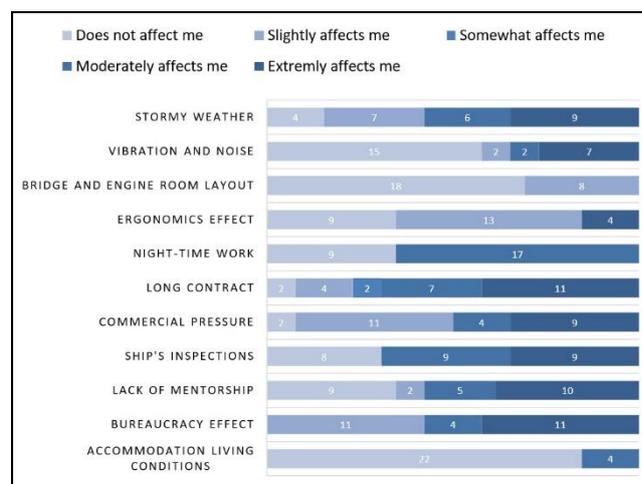


Figure 2. Determinants of wellbeing revealed by the question 'how does the factor affect you?'

"I usually stay home two and half months, not longer. It is never enough to be fully recovered from the stress gained in the previous contract. It's because of my company, they don't let me stay any longer at home as they think I might lose my proficiency to the procedures quickly if I stay longer." (3rd Officer-5).

Further analysis also indicates that some of these factors place an even heavier burden on seafarers' stress from tanker ships, mainly because of commercial aspects such as pressure from the ship operator, ship inspections and fast turnaround in ports with reduced manning levels. Two officers explained these pressures: "I think the biggest problem in the industry right now is the commercial pressure and the paperwork from the company" (Chief Officer-9). "When the ship is underway in average, I sleep 7h but in port it's never more than 4h, mainly because of watch schedule 6 on/off and then never ending all sorts of inspections." (3rd Officer-22)

4.3 Perception and awareness of wellbeing. Seafarers vs maritime stakeholders

The level of general understanding of the concept of wellbeing was the same for both seafarers and industry stakeholders. Their perception was strongly associated with the determinant factors emerging

from physical, mental and social dimensions causing severe fatigue and mental health issues.

A psychologist from the maritime sector elaborated his understanding of wellbeing as: "Through the holistic lens it includes physical, mental, social, intellectual and religious dimensions. Physical wellbeing is quite understandable by all, but mental or emotional not really." He further stated that mental health was not as well embraced by seafarers as other dimensions of wellbeing, mainly because of lack of knowledge of their rights: "When I interview seafarers, they put a smile on their face when we touch mental issues or disorders not really realizing its force and meaning. At the same time, it's crucially important for seafarers to understand that one part of their wellbeing is their intellectual capacity which will include their knowledge about their contractual rights, about organizations who would be able to support them, also their knowledge about skills, social interaction abilities, which is a trainable thing."

One maritime charity organization's representative considered wellbeing as the provision of general conditions at the living and working site, where all factors affecting seafarers' mental health can be identified. He added that seafarers are more vulnerable to poor mental health than those ashore due to a large number of determinant factors at sea.

The representative of another maritime charity organization stressed that seafarers' wellbeing needed more acknowledgement beyond their occupational limits when he stated: "To me seafarers' wellbeing is associated with the acknowledgment of the fact that they are not only occupational beings, but also social, emotional, intellectual, physical and spiritual beings."

Further analysis was made to expose industry's awareness of determinant factors and how they were perceived. Even though several of the factors mentioned by both parties were the same, stakeholders tend to possess more knowledge about elements contributing to deterioration of seafarers' wellbeing with clear and deeper understanding about the root causes than the seafarers themselves. Figure 3 shows the 24 factors identified by the stakeholders, who mentioned excessive work, being away from family and fear of job loss as the most determinant among others.

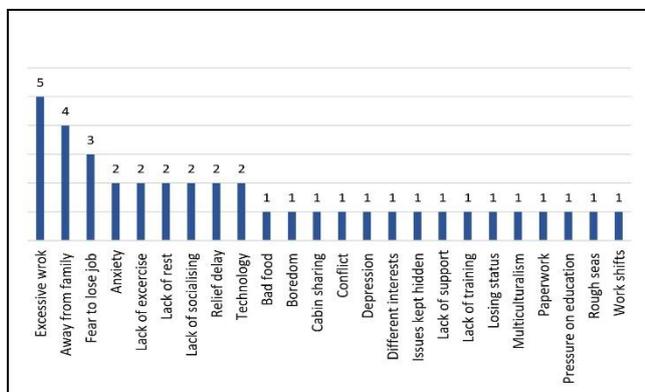


Figure 3. Factors causing deterioration of seafarers' wellbeing as per the maritime stakeholders

The industry tends to be more aware of the concept of wellbeing and its importance than seafarers

are. This is primarily connected with the lack of seafarer training on the subject as per respondents' answers. The manager of a private company offering mental health support to seafarers claimed that: "Well, there are online training courses for seafarers how to handle sleep and fatigue, but in many cases companies have not implemented them as mandatory tool within their SMS. It is simply not their focus."

This is also stressed on the comment by the international trade association admitting that the current ISM code provides more safety focused exercises rather than awareness raising training: "Yes seafarers are trained in many aspects, but this training is more like safety focused exercise. There is no leadership from top chief executive who is not really showing how to walk a walk and how to talk a talk." Moreover, similar training only captures more physical accident avoidance related aspects, rather than integrating mental and social issues linked to wellbeing: "I think in terms of trainings integrating of all the things, I would say physical thing does carry weight, like safety and accidents avoidance, but when it comes to mental health, I think it's not due importance still not given to it." (International trade union).

4.4 Awareness of the regulatory instruments and their effectiveness

The majority of seafarers and maritime stakeholders demonstrated a good level of recognition of regulatory mechanisms, mainly the MLC 2006 and particularly regulations on hours of work and rest. It is interesting to note that seafarers from oil and chemical tankers demonstrated much higher understanding and knowledge of such regulations than those from all other types of ships. This considerable comprehension was found to be related to higher standards of safety and environmental protection for such ships but at the expense of a much increased workload and lack of sleep with decreased manning levels as a root cause. However, exploration on how effectively the regulations influence wellbeing indicated that the majority of seafarers considered these regulations to be ineffective. As Master-1 explained: "It's a very difficult balance because the regulations do not match with the reality and then this is a problem and then the only viable way to survive and carry on with the ships' normal operations is just violating the regulations."

None of the other maritime stakeholders confirmed the ineffectiveness of the regulations but rather mentioned improper implementation within the companies. The welfare organization's representative elaborated that: "In most cases companies don't have policies and some companies have. And I would say in general there's a few companies that have mental health policies. For example, wellbeing is part of their policy, but it's very limited. They have it in place but not in its complete state."

The same respondent highlighted misconceptions of wellbeing, which is often incorrectly installed within shipping company policies: "There's a problem in terms of a conceptual framework from which wellbeing is understood. I think it's clear that

wellbeing is much more than just the absence of illness. But, there is no current framework that really assists in explaining comprehensively what wellbeing is in terms of international regulations."

The representative from an international trade association emphasized the company's responsibility to establish sufficient tools onboard their managed ships to set acceptable norms of wellbeing: "The company should have policies, but they don't. Because the regulations are just those a framework, international framework. A good responsible employer will have all those policies in place what is and what is not acceptable on board which would clearly set norms of facilitating seafarers' wellbeing."

The same respondent noted that companies tend to develop their own policies on wellbeing, not as a separate tool but rather integrated with the ship's safety management system. "I will say 90% of them have a policy on wellbeing integrated into the safety management system." (International trade association).

Other issues raised about the effect of the governing mechanisms were related with the failure of maritime society to seriously embrace seafarers' wellbeing, and the failure of MLC 2006 to fully capture all of its dimensions. As per the international trade union: "I think we need more time to fully implemented MLC 2006, not in terms of well-being only but in general. I think the wellbeing is an issue, which is sometime not taken seriously by everybody, because we think it's part of life, but mental health is an issue that needs to be fully addressed."

5 DISCUSSION

The results of this study are consistent with the idea that shipowners have obtained some 'freedom' to create a working environment for seafarers with minimum regulations under their own favourable terms [1]. Fear of job loss among seafarers mostly caused by the 'hire and fire' regime is a good indicator of this, as well as long periods of work without proper rest, long contracts, short leave, lack of recreational tools as per MLC 2006, unavailability of shore leave policy and lack of internet connectivity, all leading to stress / anxiety and isolation [13]. Commercial routines and the fast turnaround of ships in ports cannot be modified but as the results (particularly from tanker ships) reveal, reduced manning levels is the core factor contributing to lack of sleep, hectic work schedule, fatigue and reduced shore leave [16, 35].

The industry's awareness of the deteriorated wellbeing onboard ships and its unreadiness to deal with it - especially during global pandemic times - gives a reason to believe that seafarers are mainly perceived as a necessary 'workforce.' High expectations are put on their job performance, but their role remains undervalued [6, 20]. Moreover, despite the world's increased mental distress, ships continue to sail and business is progressing uninterrupted [11, 34]. Seafarers' lower perception of wellbeing-related issues serves as evidence that companies do not promote awareness by

incorporating appropriate training tools into their SMS, which prevents seafarers from embracing their wellbeing to its fullest [3]. The fact that existing SMS training material is mainly focused on minimizing incident and accident occurrence creates a complex paradox that ultimately the maritime industry is concerned with the seafarers' wellbeing only up to a level sufficient for running a safe and successful business. This could be the main answer to the question 'why does seafaring as an occupation suffer from deteriorated wellbeing conditions?'

Additionally, MLC 2006 provisions lack necessary elements to capture the concept of wellbeing because the results reveal that seafarers' wellbeing is still compromised in many aspects [7, 10]. Results also indicate that compliance with regulatory mechanisms seems to obtain significance only when it contributes to the success of the business. This is supported by the study's results showing that those from tanker ships demonstrate much better comprehension of MLC 2006 provisions than those from other types of ships. The global pandemic exposed the weakness of this labour regulatory instrument when the maritime industry faced increased difficulties handling issues related to seafarers' wellbeing [9]. Maritime charities take the role of offering various service tools to both raise awareness and help seafarers to cope with their mental distress [12, 25].

The research has exposed major issues related to seafarers' wellbeing, which should be the subject of deeper examination for its further improvement. First, modification of company culture is essential, which should recognize the influence of the determinant factors on seafarers' wellbeing and should incorporate it within the SMS of ships [26]. This can be achieved through installing mandatory awareness enhancing training tools, which would also contribute to reduction of the mental health stigma. Second, seafarers should be educated and trained so that the fear of being blacklisted can be eliminated and a common healthy vision towards mental health would be promoted. Such a vision should be regulated, thus incorporated within the MLC 2006 in its upcoming amendments [14, 24, 36]. Third, facilitating channels of transparent and direct communication between companies' top management and crews would give opportunities for sharing wellbeing related issues and promote effective worker representation and consultation on occupational safety and health [10]. Finally, the development of programs by the companies engaging seafarers into onboard interaction must also be taken into the consideration, enabling them to see themselves as human beings rather than as just a 'workforce'.

6 CONCLUSION

The study has exposed the complexity of the issues related with the seafarers' wellbeing, which have been experienced throughout the long existence of this occupation. However, it seems the maritime society recognizes its importance only when seafarers fail to perform their duties and tasks due to increased burden on their mental or physical health, resulting in a threat to the safety of the business. In the

multicultural, international and non-transparent shipping industry, seafarers remain vulnerable and submissive to an unfavourable working and living environment. At the same time, regulatory instruments fail to fully address the issues stemming from their deteriorated wellbeing and, with absolutely no choice, the seafarers' voice remains unheard. Global pandemic issues caused some jolt to the governments and shipping companies to take actions to facilitate the wellbeing of seafarers, but it seems to have an intermittent nature from state to state. Finally, it is important to give increased awareness and wider recognition to seafarers' wellbeing in order to introduce seafaring to the world not only as a necessary workforce, but also as human beings deserving much better living and working conditions.

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