

MENHOB – Mental Health on Board

12th International Symposium on Maritime Health

Brest, France, June 6, 2013

Maria Jeżewska¹, Robert T.B. Iversen², Irena Leszczyńska¹

¹Institute of Maritime and Tropical Medicine, Medical University of Gdansk, Poland

²Rotary Club of Melbourne South, Australia

REPORT OF THE MENHOB WORKING GROUP WORKSHOP ON MENTAL HEALTH ON BOARD

INTRODUCTION

Dr Maria Jeżewska

MENHOB Leader

Institute of Maritime and Tropical Medicine, Gdansk, Poland

The MENHOB (Mental Health on Board) idea was created for improving the quality of life of people working at sea. The physical, psychological, social and spiritual wellbeing given in the World Health Organisation health definition is very important for people who work in such demanding conditions while isolated from their families. Avoiding accidents, diseases, stress, fatigue, poor medical health and many other harmful factors is a goal we seek for seafarers. There is only one question: how to do it? Our professional and personal mission is to help them.

The first MENHOB Workshop on “Stress and fatigue at sea versus quality of life” took place in Gdansk, Poland, in June 2012 during the II International Congress on Maritime, Tropical and Hyperbaric Medicine. We successfully conducted presentations and discussed this topic. It allowed us to exchange information, experiences and our points of view about seafarers’ mental health on board. I would like to thank all MENHOB participants and the observers who attended the workshop. Results of the MENHOB Workshop were published by Jeżewska and Iversen (2012).

The current, second edition of the Workshop “Mental Health on Board” was held in Brest, France on June 6, 2013 during the 12th International Symposium on Maritime Health. Organising the meeting was difficult, so special thanks to all

who attended the workshop. This event let us further consider the problems discussed at the MENHOB Workshop in 2012 and bring up some other problems concerning seafarers’ mental health. Before the present meeting, a special issue on Maritime Psychology was published in International Maritime Health (2013), Vol. 64, No. 2. It was dedicated to the mental health problems of people working at sea.

The MENHOB Workshop in Brest considered the following psychological disorders and their impact on the ability and effectiveness of seafarers to work at sea:

- suicides (auto-aggression);
- post-traumatic stress disorder;
- psychosis (taking into account depression);
- neurosis;
- personality disorders;
- addictions;
- behavioural disorders.

Additionally presentations considered the problems of:

- identification of the causes of stress and its effects during work at sea;
- mapping how to identify the ways to reduce the fatigue;
- identification of the ways of seafarer’s quality of life improvement;
- protection of seafarers’ mental health;
- assessment of the psychological certifications – current regulations and legislation;
- identification of other necessary topics for future discussion.

Nine speakers – representatives from different seafarer mental health centres pointed out the most important and



urgent mental health problems of people working at sea in their countries. They were:

1. Dr Maria Jeżewska, Poland
2. Dr Alf Magne Horneland, Norway
3. Dr Corinne Idnani, India
4. Dr Arne Johan Ulven, Norway
5. Dr Maria Luisa Sanchez, Philippines
6. Prof Henrik Lyngbeck Hansen, Denmark
7. Dr Lijun Tang, England
8. Dr David Lucas, France
9. Dr Ilona Denisenko, Russia

The motto of our meeting was: *The Wellbeing of People Working at Sea also lies in our Hands.*

PRESENTATIONS

1. DR MARIA JEŻEWSKA

Institute of Maritime and Tropical Medicine, Gdansk, Poland

Quality of Life of Polish Seafarers

Aim: Evaluation of the Polish seafarer's quality of life. Our approach was to estimate the different elements of the quality of seafarers' life: social and family life, professional achievements, state of health, and coping with stress. Additionally we assessed the impact of isolation at sea on the life style of seafarers: nutrition, sleeping habits, rest and leisure, etc.

Background: Work at sea is considered to be highly burdening, risky and stressful. The influence of psychosocial factors is very significant and often understated. All of those indicators have an enormous impact on the seafarers' quality of work at sea and on their life satisfaction. Health state, financial status, feeling of security, employment safety and family and community life are the most important parameters of the seafarers' quality of life. Equally important are nutrition, resting and activity standards. An important indicator is the level of stress experienced while working at sea and the styles of coping with stressful situations.

Methods: We examined a group of 1,578 Polish seafarers, working on ships flying Polish flags and ships with foreign flags when they applied for their certificates of health. The research took place at the Institute of Maritime and Tropical Medicine, Gdynia, Poland. Applied tools:

- WHOQOL – BREF – Polish version;
- NEO-FFI Questionnaire;
- Temperament Questionnaire PTS;
- Coping Inventory for Stressful Situations;
- Questionnaire for People Working at Sea.

Results: The results of the research enabled estimation of the life quality of people working at sea. The assessment include such data as: age, education, work position, seniority, family situation, health state, biorhythm, harmful behaviors and other life habits.

Conclusions:

- Assessed level of life quality of people working at sea appears to be high.
 - The level of experienced stress among seafarers is average, and the level of life and work satisfaction as well as family relations turned out to be satisfactory.
 - Polish seafarers can be featured by neurotism below average. The extraversion among them is high. They are open to new experience, agreeable and scrupulous.
 - Their force of stimulating and restraining nervous processes within central nervous system are correct and well balanced.
 - The positive work related moods are connected with high life quality.
 - Coping style in stressful situations is based on the concentration on the task not the emotions.
- More details will be published subsequently.

2. DR ALF MAGNE HORNELAND

Norwegian Centre for Maritime Medicine, Bergen, Norway

Psychiatric Cases in the Appellate Body of the Norwegian Maritime Authority 2010–2012

Psychiatric diseases occur not only in seafarers serving at sea but are also seen by doctors who carry out medical examinations of seafarers. My experience has shown that during 2010–2012 among seafarers seeking medical clearance before going to sea a number of seafarers are denied the clearance due to being diagnosed with a psychiatric illness. When this occurs they have an ability to apply for an exemption so they will be able to join their ships. In 2010 18% sought an exemption. In 2011 there were 18.4% seafarers seeking an exemption and in 2012 the number was 22.8%.

There were a number of psychiatric diseases shown but most were due to bi-polar disorder and other psychoses such as Attention Deficit Hyperactive Disorder (ADHD). The trend in being diagnosed as having an ADHD problem may be attributed to a more liberal use of the diagnosis or a more liberal attitude towards use of central nervous system-stimulants. The diagnosis of ADHD and Attention Deficit Disorder seems to be given too easily and too often.

I remember a case where a seafarer had served for more than 20 years as a mate prior to being diagnosed with ADHD. He then applied for exemption. Based on his long practical experience without any incident interfering with safety, an exemption was granted. He could also report that he did not feel well or better on the medication prescribed by the psychiatrist. This individual will be serving on coastal ships or ferries between European ports. I think he should never have received the diagnosis.

When the seafarer gets an exemption there is a risk that he or she may lose the prescribed medication whilst

serving on board, and may not be able to get replacement medication suitable for the condition in foreign ports. If this happens the mental illness may become visible causing problems for not only the ship's Master but also to their ship mates.

In other cases they do not inform the approved doctor or the Master about medication in use. In one case a first officer was taking 5 mg of diazepam three times daily for 25 years whilst working at sea. He suddenly broke down from anxiety while the ship was in port, and was unable to perform his duties and take care of himself. He had to be accompanied by a doctor during repatriation; the ship had to wait for his replacement in port, and luckily no major accident occurred.

In general (including all cases in the Appellate Body) 60% of seafarers seeking medical clearances receive them with conditions attached, 20% are denied clearances and 20% are granted unconditionally. Those that get the clearance with conditions should be under the supervision of the Master of their ships.

A number of different psychological conditions may be a safety risk at sea. The doctor who carries out the medical examination and deciding on whether a medical certificate or a certificate should be issued, or assessing whether an exemption should be granted, is challenged by the difficulty of foreseeing adverse safety-threatening incidents in the future.

In discussing psychological conditions in seafaring, it is important to review which threshold should be used for denying seafarers to work at sea. The different conditions we need to discuss are psychoses, anxiety disorders, depression, affection disorders, personality disorders and developmental disorders.

3. DR CORINNE IDNANI

Idnani Clinics, Mumbai, India

The Mental Health of Indian Seafarers

This is an overview of the problems faced by many Indian seafarers as they confronted with a radical change from their previous situations when becoming a seafarer. This is based on data obtained when during 2011–2013 when our two clinics dealt with the medical problems of 7,000 Indian seafarers. When it comes to stress, 100% of Indian seafarers must confront the fact that stress comes with the job. Many are very religious and will seek God's help in overcoming problems. When problems arise they may think this is because they did not get a blessing from a certain temple or did not pray to the appropriate God. This is in contrast to seafarers from Western countries, who often show they are "macho men". Indian seafarers often come from remote villages where they may have lived in thatched houses with dirt floors.

Indian seafarers on cruise ships can develop anxieties due to the pressures associated with the job. They can be anxious about whether their supervisor will give them good reports and thus have their contracts renewed or get employed with another shipping line. They may be vegetarians and when faced with a non-vegetarian menu they can become anxious. When they become anxious they will usually not seek help. Only 2% of seafarers assessed at the two clinics were shown to have developed a psychosis. In one case a seafarer announced to his shipmates that he was "God himself". This caused him to leave his ship, but when on his next ship the psychotic episode repeated as he told his ship mates he was "God himself" again.

Indian seafarers are often gullible and impressionable. An example would be a lawyer telling a seafarer he or she has grounds to sue the shipping line due to something the line has done or has not done. As a lawyer says such a suit will result in \$100,000 to the seafarer, but in the end the lawyer gets \$90,000 and the seafarer only \$10,000.

Problems at home can cause an Indian seafarer to become anxious. They may receive a telephone call saying their father is sick and in the hospital — and that the family needs the seafarer to send money home right away. Such a request received while at sea can cause anxiety if the seafarer does not know how to respond. When this happens if a caring ship mate or supervisor can help the seafarer understand there are ways to handle such a request which will be of great assistance in making an Indian seafarers life a great deal happier.

4. DR ARNE JOHAN ULVEN

Norwegian Centre for Maritime Medicine, Bergen, Norway

Psychological impact of Staying on Board for Periods of Six Months or More

Some important influencing factors:

- Age. Many young cadets stay on board 9–12 months. A caring Swedish Captain tells me that 7 or 8 out of 10 young cadets have to be signed off and sent home after 6+ months. How long have they suffered before being signed off? What are the personal consequences?
- Limited access to E-Communication: regular email, voice E-mail, Twitter, Facebook, SMS, MMS, and Skype.
- Availability/capacity and cost of bandwidth. Charging the crew and making a profit on bandwidth necessary for normal E-Communication. The lack of willingness to establish sufficient bandwidth for crew.
- Spouse at home — NO. How to establish a relationship whilst on board?
- Spouse at home — YES. Is spouse strong or weak? Practical or not practical? Independent or dependent? Working outside or at home? Limitations on spouse's

career? Stable or unstable relationship? Concerns about unfaithfulness?

- Any children? Number, age, healthy or sick? Activities type of involvement needed? Lack of role model? Drugs or alcohol?
- Are parents alive? Are they healthy or sick? Is there a resource when care is needed?
- What is important: family network, job security for the seafarer, social network and help from neighbors, practical challenges, economic factors, HSE for the seafarer, his schedule on ships.

5. DR MARIA LUISA SANCHEZ

“K” Line Clinic, Manila, Philippines

Emerging Mental Cases

- Seafaring is a stressful occupation, with long hours and fatigue often posing problems for crew. A lack of exercise, poor nutrition, isolation, smoking and drinking can also spell bad news for on-board health, so it is important to take steps to stay well.
- Mental illness among seafarers is of growing concern and it is believed that mental health problems may contribute to many other physical conditions that seafarer’s experience.
- Stress is a threat to Filipino seafarers which account for 25% of the world’s 1.3 million seafarers.
- According to psychiatrists, while cases of mental illness in the Philippines are on the rise with the increase in population, the Filipino’s faith in God, sense of humor and concern for others are among the mechanisms that help them cope with situations that can lead to insanity.
- The Philippines Psychiatrists’ Association has said some of the factors that trigger mental illness include stress factors like traffic, loss of loved ones, disasters and even bombings.
- Filipinos have their own natural coping mechanism. We are very much crisis oriented and we have natural ways of coping with crises. Resiliency is one characteristic that is inherent among Filipinos.

Profile of four cases of seafarers with mental illness:

- Repatriated from January–May, 2013. All were ratings from the engine department. Worked for one manning principal. They were 23–40 years old. Their duration on board was 2–8 months. They had no existing illnesses.
- Diagnosis: All diagnosed to have mental disorders on repatriation and are still under treatment. All were noted to be depressed due to family problems a few weeks prior to diagnosis.
- Conclusion: Mental disorders due to depression can affect seafarers at any point in time on board. The number

of cases may be small in general but the impact of their effects are significant.

According to the World Health Organisation depression is a common occurrence with about 121 million people suffering from the disorder. However, depression can just be a normal reaction to a sad situation. Attention Deficit Hyperactivity Disorder diagnoses are common.

Recommendations:

- Other crew members must be sensitive to identify crew at risk for depression and help depressed seafarers.
- Take a good look into the cultures of these ships since they may be an outcome of much deeper problems such as bullying and harassment.
- Strengthen programs such as stress management and personality development for good seafarer mental health

6. PROF HENRIK LYNGBECK HANSEN

Centre of Maritime Health and Society, Esbjerg, Denmark

Current Trends in Mental Health Problems among Seafarers and Fishermen on Danish Ships

Attention Deficit Hyperactivity Disorder (ADHD)

- ADHD diagnoses are common among young men seeking careers as seafarers. We have found the diagnosis of ADHD is now used extensively: 2–3% of all those examined were less than 18 years old.
- A few decades ago boys with ADHD were often sent to sea. Poorly adapted youngsters were a problem in society and a solution has always been to send them to sea. They were then out of sight and the well-organised hierarchical structure, in combination with hard work on board ships, in some cases actually fitted these poorly adapted persons well. However the demands in modern ships have changed dramatically and there are no longer jobs on board for hyperactive and poorly educated young men. I have an example from the 1970’s, where the court decided not to jail a young man if he signed on a ship!
- To what extent should they go to sea?
- Is it acceptable to have young persons on medication on board merchant ships?

Suicides on board

- We see approximately one suicide per year in the Danish merchant fleet.
- About half disappear from ships in open seas.
- The remaining either hang themselves or use CO₂ in confined spaces.
- No preventative attempts are made – suicides are “contagious”.

From experience ashore, it is well known that the spread of information on suicides or suicide attempts may cause new suicides. Information on suicides is therefore not re-

leased by the authorities. This is different from how traffic deaths are handled. Information about them is released to the public.

This does not mean that seafarers with psychiatric problems cannot be assisted with good results. Seafarers on board Danish merchant ships actually have access to psychological assistance, even by e-mail. During 1 year, 52 navigation officers used this opportunity. This is a very important use of new technology. Some of them may possibly be at risk of committing suicide. My experience among seafarers shows that in most of the cases there are no early warnings of suicide. This is the same pattern seen among other middle aged men. Suicide attempts in this group are very rare.

7. DR LIJUN TANG

Seafarers International Research Centre, Cardiff University, Wales, England

Report on the Seafarers International Research Center's Health and Medication Project

In this presentation, I report some of the findings from the Health and Medication Questionnaire study carried out by my colleagues Iris Acejo, Helen Sampson, Nelson Turgo and Emma Wadsworth.

The questionnaire was distributed in seafarers' centers located in the United Kingdom and Germany in 2010 and 2011. A total of 1,026 working seafarers completed the questionnaire, including 1,004 male and 22 female seafarers. Fifty-three per cent of them were ratings, 25% were junior officers, and 22% were senior officers. Table 1 shows the sample distribution by nationality.

In the questionnaire respondents were asked to describe their health over the past 12 months. Table 2 compared the result of this study with that of the Health Survey for England 2004 (<http://www.natcen.ac.uk/media/460320/c78191bb-1c0d-4e18-9eaf-db-6b8035647d.pdf>). The table clearly shows that compared with the England male population, seafarers were more likely to report better general health. This is not surprising, as seafarers have to have medical check-ups before joining a ship and clinically unwell individuals may not be allowed on board.

In terms of mental health, however, the results were quite the opposite. Regarding psychosocial health, the Health and Medication Questionnaire included the 12 item general health questionnaire (GHQ12). Table 3 shows that compared with that of the England male population, seafarers reported slightly worse psychosocial health.

The study also utilised the Hospital Anxiety and Depression Scale. Table 4 and Table 5 shows the anxiety and depression scores respectively. Compared with the Ger-

Table 1. Sample distribution by nationality

Filipino	17.7%
Indian	15.8%
Other Asians	17.6%
Northern, Western and Southern Europeans	12.4%
Eastern Europeans	24.7%
Others (including Middle Easterners, Africans and Small Islands)	11.8%

Table 2. Self-reported general health

Self-reported general health	England general (male) population	Seafarers
Good	77%	87.5%
Fair	17%	11.2%
Poor	6%	1.4%

Table 3. Self-reported psychosocial health

GHQ12 score	England general (male) population	Seafarers
0–3	89%	87.1%
> 3	11%	12.9%

Table 4. Hospital Anxiety and Depression Scale – anxiety

Anxiety score	German general population (2001)	Seafarers
0–7	80.7%	55.8%
08–10	13.5%	36.3%
> 10	5.9%	7.8%

Table 5. Hospital Anxiety and Depression Scale – depression

Depression score	German general population (2001)	Seafarers
0–7	78.3%	67.2%
08–10	13.3%	27.2%
> 10	8.5%	5.5%

man general population (Hinz et al., 2010), seafarers were slightly more likely to report moderate and severe anxiety (> 10) and slightly less likely to report moderate and severe depression, but the differences were not striking. What is striking, however, are the differences regarding minor anxiety and minor depression (08–10). Seafarers were almost

two times more likely to report minor anxiety and one time more likely to report minor depression.

To conclude:

- Seafarers reported better general health than the general population.
- In terms of self-reported psychosocial health, the general population scored slightly better than seafarers.
- More seafarers reported minor anxiety and depression than the general population.

Thus, despite the better general health, the study shows that seafarers were more likely to suffer minor mental health problems.

8. DR DAVID LUCAS

Societe Francaise de Medicne Maritime, France

Two fishermen's Deaths at Sea: Was this an Accident, a Homicide or a Suicide?

On 15 April 2013 near the Scilly Islands (about 50–100 km off the southwestern tip of England), 2 fishermen were lost at sea.

Those 2 fishermen were working on a small coastal fishing vessel (4 crew members and a Captain). They were found missing overboard in about 3 min. During this time no work was being done on deck and meteorological conditions are good; the Captain was in the gangway, the other 4 fishermen were on deck.

The big question is: was this an accident, a homicide, or a suicide?

Because of the context: these were 2 good friends with personal problems (recently divorced, financial worries) and because they were not wearing lift belts and were swimming in a direction opposite to the boat's course, this is probably a double suicide.

For maritime physicians, this case underlined 3 problems: posttraumatic stress for crew members of the fishing vessel, how to detect psychological disorders and depression in the population of seafarers, and how to prevent it.

We can offer specific learning during maritime medicine courses (initial and during entire careers) and also specific training for officers.

9. DR ILONA DENISENKO

International Maritime Health Association, Russia

A Clinical Psychosomatic Case on a Research Vessel

We are facing more and more globalisation processes, especially in the maritime sector. New technologies are helping seafarers to communicate and it is now easier to contact Radio Medical Centers and get medical advice.

My short story will show how it is possible to use easy communication possibilities such as Facebook.

A Filipino colleague, Dr Ryan Elrey Navarro, a ship's doctor who was serving on a seismic research vessel operating between West Africa and Brazil, contacted me regarding one of the ship's navigators from Ukraine. The patient was facing certain urological problems and before sailing had a lot of tests done in Odessa, but treatment was not prescribed. Dr Navarro kindly asked me to translate results of these tests, which were in Russian.

The patient's complaints were: pain on urination, polaciuria, pain in his groin and general weakness. The following tests were made: urine, culture, blood and a prostate examination. A kidneys ultrasound was done, as well as tests for sexual transmitted diseases (Chlamydia trachomatis, ureaplasma, syphilis, and HIV). All results were negative except urine culture which indicated a high level of leucocytes and unchanged erythrocytes, which showed a growth of pathogenic bacteria. Somehow the treatment was not provided in Ukraine and the patient was sent on board to go to sea.

Because of his untreated urinary tract infection the patient developed enuresis. He was not able to hold his urine for more than 1 h and because he was on 12 h shifts — after 12 h he was highly depressed because of the situation and tried to maximise the limited liquids he was drinking, which worsened his primary diagnosis.

Dr Navarro introduced the patient to me and we chatted together in English as well as privately in Russian, which was patient's native language. During these conversations I realised that the seafarer was afraid to be completely open with Dr Navarro. He preferred to talk to a female doctor about his problems, including sexual ones, rather than a male doctor. Why? I was not in contact with the ship's Captain and the seafarer was afraid that the ship's doctor would talk about his condition to the Captain.

Ciprofloxacin was prescribed and the patient's condition improved moderately after 3 days. He was then able to hold his urine for around 3 h but was still afraid of wetting his pants. I chatted with the patient using Facebook for about 30 min every day. During these sessions I realised that the urinary infection was not his only problem. He remembered that a year ago after lifting weight of 22 kg he had severe pain in his groin which he has been ignoring. He also has a troubled relationship with his girlfriend and had a desperate need to talk to somebody about this problem. He was also scared that he might have something more serious than a urinary tract infection and for the last weeks was not able to sleep very well.

After complex therapy the seafarer made a complete recovery.

Conclusions: 1. These days Facebook can benefit communications between the patient and the doctor. 2. We must remember to watch patients from all angles and not to forget to talk and to ask questions. 3. In many cases patients prefer

to have communications in their mother tongues, especially when we are talking about psychological problems.

DISCUSSION AND SUMMARY

The Workshop presentations have addressed the problem of seafarers' mental health on board from a many different points of view.

On the one hand certifying seafarers to be healthy enough to go to sea is not an easy task for doctors conducting medical examinations and analysing the results. In the past many seafarers who have what is now recognised as bi-polar disorders should not have been allowed to go to sea. On the other hand seafarers who may be bi-polar or with other mental health problems such as being anxious could receive a certificate of health with conditions specifying they should be prescribed suitable medications and remain under the supervision of ship's Masters. Such seafarers should serve on ships serving limited areas, such as on coastal ships and ferries serving ports in Europe.

Then there is the problem of seafarers coming from cultures such as in India where they lived in a relatively simple lifestyle and were not ready for the changes they will face when boarding ships with numerous cultures on board. Such seafarers may become anxious that their supervisors (such as on cruise ships) will not give them positive reports – perhaps due to them as a result of not praying to the appropriate Indian God or getting blessed at the appropriate temple before leaving home.

Concerning newly arrived cadets on board ships, important factors can be their age and in some cases 8 out of ten Swedish cadets were signed off after being on board for only 6+ months. Several presenters emphasised the importance and availability of E-Communications such as Email, Twitter, Facebook and Skype so that seafarers can stay in touch with families at home and receive help when problems arise. In 1 year 52 navigators on Danish ships

received psychological information via Email – showing the use of the Internet to reach seafarers with information on mental health problems is becoming very important. The importance of Filipino seafarers, who make up about 25% of the world's 1.3 million seafarers, needing help when confronted with mental health problems was noted in several presentations. Personal traits such as Attention Deficit Hyperactive Disorders and Attention Deficit Disorders have become important in examining seafarers' suitability for a life at sea.

Several presenters brought up the subject of suicides by seafarers. That suicides by seafarers are a matter of concern to international maritime interests is well established. Iversen (2012) has shown that from 1960–2009, among 17,026 seafarer deaths at sea, 5.9% were suicides, a percentage much higher than suicides among the general populations of both the United Kingdom in 2011 and Australia in 2011. One presenter called attention to the fact that knowledge of suicides can be "contagious" if the word of suicides gets around.

The main conclusions that can be drawn from these papers are: 1. The problems faced by doctors examining seafarers for certificates of health are becoming more difficult to solve. 2. The mental health of seafarers is in many cases not very good and often fatal. 3. There are many reasons for this. 4. That a lot more effort, in particular with modern means of E-Communication and using the Internet, is needed to improve the health and welfare of seafarers.

REFERENCES

- Hinz A, Krauss O, Hauss JP et al. Anxiety and depression in cancer patients compared with the general population. *Eur J Cancer Care* 2010; 19: 522–529.
- Iversen RTB. The mental health of seafarers. *Int Marit Health* 2012; 63: 78–89.
- Jeżewska M, Iversen R. Stress and fatigue at sea versus quality of life. *Int Marit Health* 2012; 63: 106–115.