

# Mental readiness for maritime international operation: procedures developed by Norwegian navy

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## ABSTRACT

Seafarer's mental health is vital for a well-functioning organisation. Neglecting mental health status on board could be extremely costly for both the crew affected as well as the company. The present article outlines an extensive programme implemented in the Royal Norwegian Navy for personnel deployed in international operations. The challenges involved in international operations bare similarities to onboard personnel in civilian maritime operations.

The program utilised by the Royal Norwegian Navy is extensive and not immediately applicable to civilian maritime companies. However, elements of this program could be used with limited resources. Questionnaire based screening, before, during and at the end of a contract period could result in early detections of mental health problems and increased retaining of personnel. This should be done by health professionals. Early targeting of at risk personnel could prevent serious costs for the individual as well as the company.

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**Key words:** seafarer, prevention, mental health, crisis support

## INTRODUCTION

In a review of published and unpublished information, Iversen [1] concluded that seafarers mental health was in many cases very poor and often fatal. Possible causes of poor mental health was long deployment at sea, long work hours, sleep deprivation, fatigue, lack of shore leave, criminalisation, harassment and bullying, as well as dangers from piracy. These causes can lead to anxiety and depression and in some cases to suicide. Based on statistics from 1960–2009, Iversen [1] showed that 5.9% of total deaths on board vessels were suicides. These numbers did not include seafarers who disappeared at sea. Thus, the real proportion of death by suicide could be estimated higher. A large body of evidence has shown that working on board merchant ships is one of the most mentally and physically demanding professions with a potential for severe somatic and psychological distress [2–4].

In order to counteract this potential threat towards sailors health, Iversen [1] suggested more emphasis on psychoeducative and other preventive methods. More specifically, he recommended material produced by both the Rotary Club of Melbourne South and the International Committee on Seafarers' Welfare [5] which present both information on mental health issues and instruments to evaluate mental health status on board. The cost of neglecting seafarer's mental health could be high, for the individual at risk, their families and coworkers, as well as the company.

The possible causes of poor mental health stated by Iversen [1] are similar to stressors of Naval military personnel deployed in international operations. In addition, naval personnel will face the stressor of potential combat. Another similarity to military personnel is the reluctance of seafarers to seek professional help for mental health problems. This could be caused by the social stigma of mental

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health problems and the fear of losing certificates as well as future contracts. The aim of this article is to present an extended psychosocial prevention program used in the Royal Norwegian Navy (RNoN) concerning naval personnel's mental health in international operations. This could be viewed as a preventative program of applied social and community psychology, developed to evaluate and improve sailor's mental health, including screening and consultation regarding psychopathology.

## BACKGROUND

The RNoN has to an increasing degree participated in worldwide international naval operations. Because of the increased operational area, the medical branch of the naval staff has developed standard procedures in order to increase sailor's mental preparedness and sustainability as well as welfare and safety of its onboard personnel. The intention is to enhance the operational status of both personnel and vessel.

In May 2011 the Norwegian government published the action plan 'I tjeneste for Norge' ('Serving for Norway'; [6]), presenting a range of measures intended to strengthen recognition and care for Norwegian personnel participating in international operations. Naval personnel have participated in a wide range of international operations during the past years, from Special Forces and mobile observation teams in Afghanistan, to antipiracy operations in the Bay of Aden, mine countermeasure operations in the Mediterranean Sea, and escorting civilian freighters carrying components for chemical weapons. Naval participation in international operations is likely to continue in the future. The measures specified in the governmental action plan, combined with the exposure of naval personnel in international operations, make out the background for the naval staffs work on mental preparedness, which includes preparation before deployment, evaluation during deployment, end of mission evaluation, and post deployment follow up.

## THE NORWEGIAN NAVY'S' UNDERSTANDING OF MENTAL PREPAREDNESS

In order to perform effectively in operational settings, personnel are required to have certain knowledge, skills, and attitudes. In operational settings there is often an exclusive focus on skills and knowledge, when preparing personnel for operations. Thus, almost all training of crewmembers is skills based, resulting in a potential gap between the skills needed to perform and the *will* (attitude component) to perform. This problem is further exacerbated by procedures applied to evaluate the readiness of personnel, where almost all evaluations are performance based.

There are at least two possible loopholes to this one sided form of preparation. For one, simply verifying that basic skills are present provides no guarantee that personnel are going to exercise those skills in extreme and threatening situations. Also, in the same way as skills and knowledge may decline over time if they are not maintained, the will to perform can be seriously affected by both time and psychosocial factors. This is in parallel to civilian maritime trade where competence (or will to perform) is a combination of knowledge, attitude, skills and abilities. Familiarising personnel and leadership with these challenges, and discussing ways of coping, may reduce the impact of such threats to performance.

In looking at mental preparedness, planners must consider factors at the individual level as well as at the unit level. In order for personnel to be able to adapt and perform under stressful conditions, and over longer periods of time, they need to have confidence in their own equipment, procedures, and abilities to perform the tasks needed, as well as a sense of meaningfulness and recognition for the work they do. This includes an active attitude toward solving problems as well as the belief that one is able to find solutions. Thus, individual factors such as self-efficacy [7], task-focused coping style [8], and hardiness [9, 10] could be included in an evaluation of individual mental readiness. As a part of the individuals' belief in his/her abilities and active attitude, the subjective evaluation of own skills is important. This includes coping skills, ability to monitor team members, and the will to act in demanding situations.

The evaluation of mental preparedness in the RNoN is conducted using questionnaires. Standard scales of Personality Hardiness (Dispositional Resilience Scale – 15 item version [11]) and of subjective evaluation of their professional performance as naval personnel (adapted to naval personnel from Solberg et al. [7]) are administered.

Furthermore, an assessment of mental status should also be included when evaluating individual preparedness. This could prevent vulnerable individuals from being deployed who could be a risk to themselves, their teammates, and the operation as a whole. Thus, the procedures include Hopkins Symptom Checklist (25 item version [12]), and General Health Questionnaire (12 item version [13]). Sleep problems are measured using Bergen Insomnia Scale [14]. Individual preparedness includes subjective safety and risk assessment related to the mission, as well as an individual sense of meaningfulness and motivation for the particular mission.

When looking at the unit level, evaluation of level of operational experience, expectations, preparations and cohesion in the unit (both horizontal and vertical), as well as the sense of trust in and support from the higher levels of the organisation, should be performed (for a more detailed explanation – Johnsen et al. [15]).

## THE NORWEGIAN NAVY'S' PROCEDURES: PREPARATION

In addition to the procedural and skill-focused preparation done by the shore based institutions, crew and vessel leadership, mental preparation will contain various other elements.

### STAFF WORK

**Consideration of health threats.** Based on the mission given, information about area of operation and threats likely to occur, the medical branch of the naval staff produce a written consideration of possible threats to mental health. These are listed according to likeliness and seriousness of consequences, and groups of personnel likely to be particularly exposed or vulnerable are targeted. This is, in turn, followed up with appropriate interventions.

**Employer contingency organisation.** The Norwegian navy has, as all other employers, a responsibility for taking care of its' employees should these come to harm. This responsibility involves taking care of affected personnel, their next-of-kin, and handling interest from the media. Should a Norwegian naval vessel be involved in a critical incident, the employer contingency organisation will activate a crisis staff trained to manage these situations. The administration, education and training of this crisis organisation is a constantly ongoing task, involving, among other things, 4 yearly exercises. The staff has various tools and resources at its disposal. Among these resources are the naval staff crisis support team and family assistance workers (FAWs). The naval staff crisis support team is a cross-disciplinary unit containing medical doctors, licensed psychologists, nurses, and priests, and could be expanded using other relevant groups of personnel. The unit has the capability of deploying at short notice to any given location. The team is a "virtual organisation", meaning that the members on their day to day duty act in other positions in the navy. When scrambled, the team members are relieved of their normal duties and enter as members of the crisis team supporting the crew of the affected vessel.

FAWs are naval personnel volunteering for the task of assisting next-of-kin of affected personnel. In case of a critical incident, FAWs will report to the employer contingency organisation, and be appointed to the affected family they are to assist. The FAWs receive basic training in human reactions to crisis and bereavement, procedures for rituals and practical procedures (e.g. autopsy and criminal investigation) and considerations related to loss of life, insurance and welfare rights, etc. FAWs are not professional helpers, and are not to take on tasks related to grief work or therapy. Their task is to be point-of-contact between the navy, as employer, and the affected family, to be a channel of communication and assist the affected family in matters related to the navy's' responsibility as employer.

**Education and preparation of vessel leadership.** In the immediate aftermath of a critical incident, the vessel leadership will be responsible for the psychological well-being of the vessel crew, and may not have mental health professionals available for guidance until hours or even days after the incident. For this reason, members of the vessel leadership are educated by licensed psychologists in procedures for psychological first aid and procedures for organising a caretaking environment after critical incidents. These procedures are in accordance with the principles used by the naval staff crisis team. Also, a standard operating procedure for critical incidents is formulated for the vessel. This is to be used as a basic guideline for the vessel leadership in organising basic psychosocial care for the crew after a critical incident, until professionals from the naval staff crisis team can be reached and used for further guidance. A basic principle for the work of the naval staff crisis team is to maintain the organisational structure of the affected vessel or unit in the management of a critical incident. Mental health professionals from the naval staff crisis team will therefore not take over the leadership of the organisation, but rather work as counsellors and advisors for the vessel leadership.

**Preparing next-of-kin.** Sailors' family situations affect their wellbeing as well as their motivation in onboard settings. A study from the Norwegian navy [16] reported that crewmembers characterised by a high degree of task focused coping style experienced more support and readiness from their families and less worries about family issues. On the other hand, an avoidant habitual coping style was related to less support and more worries. Worrying about family problems, sense of family preparedness and sense of support from family were also related to the crewmembers' mental health problems and motivation. Thus, an important part of preparing a crew for deployment is preparing and informing next-of-kin. The concern and worry of family members or spouse can result in strained relations between next-of-kin and crewmembers. Lack of support from family and/or spouse can be a source of mental strain, and cause guilty conscience among crewmembers for being absent during deployment. If this source of extra mental strain can be reduced or removed, crewmembers may have more capacity to focus on their job and the mission at hand, resulting in improved coping with long-time deployments.

As part of a preparation for international operations 'family-days' are arranged at the naval base, where next-of-kin get to meet vessel leadership, and are given a presentation of the mission, the risk involved, and arrangements for taking care of both crew members and next-of-kin (insurance benefits, legal advice, point-of-contact in the Navy for next-of-kin, etc.). Information regarding known challenges, and ways of coping, for families of deployed personnel is distributed in the form of leaflets and a presentation given

by a counsellor. A guided tour of the vessel is also conducted, giving next-of-kin a chance to see the place where their significant other is to spend the next months.

**Preparing crew members.** Crewmembers are divided into groups of around 10–12 persons, and given a brief by a licenced psychologist from the naval staff medical branch, focusing on mental preparedness, stress and coping. Potential stressors of the particular mission are presented and discussed. Following the brief, there is a discussion focusing on expectations among the crewmembers themselves, their own feeling of actual readiness and skill level, and the individual sense of meaningfulness of the mission.

A mental readiness screening of the entire crew is conducted, using a questionnaire containing standardised mental health questionnaires and questions specific to deploying on a naval vessel. Screening for mental health issues is an important factor on the individual level. Personnel with high scores on anxiety, depression, sleep problems or low quality of life are targeted and given individual consultation. If they are considered not suitable for deployment, they will be refused to participate in the operation.

A feedback session to the master is conducted based on both questionnaire data as well as on the group sessions. In this feedback session the state of readiness of the crew is discussed, and concerns discussed in the group sessions are presented. The intention of the feedback session is to give the master the best possible information about the state of his crew, and, if requested, give advice on possible measures to be taken. The work of preparing crewmembers is preferably conducted on board the vessel at sea. Spending time with crewmembers and having informal conversations is an important part of gaining acceptance and trust, and getting a general impression of the unit level of preparedness and cohesion. In addition, it gives crewmembers the chance to air any questions or concerns they may have in a private setting.

## EVALUATION DURING DEPLOYMENT

Evaluation during deployment carries an almost exclusive focus on the crewmembers, and is conducted by licenced psychologists from the naval staff medical branch on board the vessel in the area of operation. The standardised questionnaire is distributed, collected and scored aboard the vessel (using a portable scanner), and individual consultations are conducted if needed. Personnel in particularly exposed positions go through mandatory individual consultations.

Focus groups, each consisting of 10–12 crewmembers, are also conducted. The average duration of the focus groups is around 90 min. The topics of conversation in these groups are mostly of an operative focus; what is working well on board, what improvements can be done, how can

crewmembers themselves improve their own situation, what challenges/threats exist, smoothness of cooperation between departments on board, or flow of information.

After reviewing and collecting data from questionnaires, and after having conducted focus groups for the entire crew, the master is given a feedback session where results and findings are presented and discussed (including trends from preparation to mid deployment). Possible interventions or changes are discussed if the master wishes so. During deployment next-of-kin are kept as informed as possible about activity on board and plans for the following days and weeks. Using social media the vessel leadership can publish pictures and comments on a continuous basis, in addition to a letter written by the master and sent to the crew's families every 2 weeks. In cases where acute notification is needed, text messages can be automatically distributed to next-of-kin for all crewmembers.

The focus of the evaluation during deployment will of course depend on the nature of the operation, and what situations have occurred during deployment. Have there for example been critical incidents, the focus of the group discussions will be more around how the crewmembers experienced these incidents, how they are coping, and what their sense of risk and security is on board. Should there prove to be a poor working environment on board, for example involving cases of harassment or conflict between individuals or groups, the focus of the evaluation may be directed at improving these situations. Getting the right focus is key for a successful evaluation/intervention. More often than not, there will be a wide array of situations or issues, and not a single main focus.

## END OF DEPLOYMENT EVALUATION

Procedures for end of deployment evaluation carry much resemblance to the prior evaluation during deployment, involving questionnaires, focus groups, formal individual consultations if necessary, informal conversations, and a feedback session to the master. However, the focus of the conversations will shift. Evaluation during deployment is conducted with an intentionally more active attitude, intending to instil a sense of agency and efficacy in the crewmembers, promoting improvements and positive change on board. End of deployment evaluation is used to sum up experiences and lessons learned during deployment, and turning the crewmembers focus to the experience of coming home, and the challenges associated with stepping back into the everyday routine from which they have been absent for a considerable period.

The end of deployment evaluation is also preferably carried out on board the vessel, by licenced psychologists from the naval staff medical branch sailing and living with the crew for a longer period (around 2 weeks).

As with the evaluation during deployment, the end of deployment evaluation is adjusted according to the nature of the mission, whether there have been critical incidents, etc. In addition, a brief for the master is given based on the information collected. A brief of trends over the mission, included statistics, could give the commanding officer feedback of status as well as effects of interventions implemented after the mid deployment evaluation.

## POST DEPLOYMENT FOLLOW UP

At 3 to 6 months after redeployment, a post deployment follow up is conducted, by distributing a questionnaire. The focus of this follow up is on late effects of deployment, in particular adjustment problems and psychological symptoms associated with anxiety, depression and post-traumatic stress disorder.

Individual cases known beforehand from mid deployment evaluation or end of deployment evaluation, as well as crewmembers having served in particularly exposed positions, are given particular interest, and may be invited to formal individual consultation.

Individuals requiring further attention are either followed up by the naval staff medical branch, or referred to further specialised treatment elsewhere.

## CONCLUSIONS

The Norwegian Navy's work on mental preparedness carries a double focus. First of all, and most important, is ensuring the mental health of the personnel deploying to international operations. This is done by mentally preparing crewmembers, screening for symptoms, and offering formal individual consultations if required, making support to troubled crewmembers easily accessible. An example of this is monitoring the degree of sleep problems on board, and giving advice on how to improve sleep to those in need. The second focus is on contributing to increased operational ability, by using knowledge of normal aspects of psychology. This could include detecting organisational issues experienced as problematic for crewmembers lower in rank and making vessel leadership aware of such issues, in hope of improving the situation. Or even better; motivating the crewmembers themselves to take initiative and improve their situation.

The program utilised by the RNoN is extensive and not immediately applicable to civilian maritime companies. However, elements of this program could be used with limited resources. Questionnaire based screening, before, during and at the end of a contract period could result in early de-

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