IMHA workshop: The Management of Medical Incidents at Sea

London, 2 - 3 February 2015

Further to the article published in IMH last year[1] and kindly supported by the ITF Seafarer's Trust, IMHA hosted this workshop in February 2015. It was well attended with over 30 participants from a number of nations and all with an interest and experience in maritime health. The programme ran over two days and included presentations and a series of small group sessions in which key areas were discussed in more detail. The conclusions from these sessions were then discussed by all in attendance. At the end of the workshop a consensus statement below was agreed by all and this was then ratified by the IMHA board in June 2015 as an IMHA position paper. A full report has been compiled and is available on the IMHA website[2].

Consensus statement

Background

The ILO/IMO Maritime Labour Convention 2006 states that:

The requirements for on board health protection and medical care set out in the Code include standards for measures aimed at providing seafarers with health protection and medical care as comparable as possible to that which is generally available to workers ashore.

IMHA convened a workshop to address concerns raised in the management of medical incidents at sea. Current management includes the following aspects that are not always integrated in their delivery:

- Training in medical care and medical first aid at sea
- Medical stores, equipment and facilities on board, including 'doctors bag' on ferries
- National and International medical guides
- Telemedical advice and medevac arrangements

In consequence of this health care for seafarers is far from optimal and there are considerable difficulties in ensuring international consistency.

There is a common regulatory framework although this involves a number of conventions and recommendations. These are then redrafted as national regulations and guidance. As medical care at sea is a small part of a number of conventions change will not be easy.

Current experience

A case series of medical incidents at sea presented at the workshop demonstrates that earlier involvement of TMAS and the availability of/ increased use of point of care diagnostics will increase diagnostic certainty and may potentially reduce over triage and costly disembarkations.

It is estimated that on average a ship experiences one serious medical incident every two years so each seafarer trained in medical care can only expect to see such a case every four years.

[1] Carter T, Stannard SL. Healthcare at sea: are regulations a guarantee of minimum standards or a barrier to improved practice: International Maritime Health: 2014; 65, 4: 1–4

[2] http://imha.net/information/workshops/18-imha-workshop-reports.html.

Trends reported verbally from TMAS vary but tend to indicate a reduction in trauma cases and an increase in medical cases, particularly issues related to chronic disease. The average age of seafarers requiring disembarkation has also increased.

Experience, training and knowledge are key to the management of medical incidents. This is not only true for the trained officer but also for the TMAS Doctor.

Treatment pathways are used successfully in a number of remote care environments. However they are NOT a replacement for education, clinical knowledge, physician judgment or common sense. They are also not protocols but a set of guidelines within which to work.

Issues identified

There is a system and the strength in that is that it does give minimum standards. However these are low and they are not always enforced by the relevant authorities.

Most incidents involve dealing with common problems although most of the training is concerned with the management of emergencies. There is little research to demonstrate the number and types of incidents that are handled on board.

There are language and cultural barriers between officers and crew of different nationalities and with Doctors of yet another nationality.

There are sometimes barriers to joint initiatives between the UN agencies.

Training:

There is huge variability in the training given, both the content and the method of training. Currently there is audit of trainers in some countries but not by people with a background in maritime medicine.

The standard of knowledge and skills of seafarers when they attend for refresher training after 5 years is often poor and alternative models for maintaining, and potentially improving, knowledge and skill levels should be considered.

Medical chest and equipment

There is variation in the requirements for the contents of the medical chest internationally. These are also often not consistent with current best practice. This leads to significant difficulties in providing appropriate training and in communication with TMAS services. Many officers are not familiar with the contents of the medical chest and the use of proprietary names for medication may lead to additional confusion. In addition there are major concerns about the standard of medication and the means of transportation and storage.

Medical guide

The current edition of the International Medical Guide for Ships is out dated with regards to many recognized best practice guidelines. National equivalents vary in style, content and quality.

Language is frequently an issue. Although English is the recognized language of the maritime industry the English capability of many seafarers does not include medical terms.

There are inconsistencies in the quality of information that seafarers are able to provide to TMAS.

The way forward

The management of a medical incident at sea should be a seamless process from the presentation of the crew member with a medical complaint to the medical officer, to contact with TMAS services and appropriate management. All components should be integrated to ensure that medical incident management is optimal.

The management of a medical incident is itself part of the whole medical system which may include medical selection of seafarers, health and safety at sea, health promotion, medical incident management, TMAS support, evacuation if required, shore based care, repatriation and rehabilitation.

Seafarers are international. Regardless of the flag of the ship, the nationality of the owner etc the target group for improved care are international and any change must be international to address this. Hence guidelines must be international.

Treatment pathways

The introduction of treatment pathways must be part of an integrated approach to the management of medical incidents at sea and must have international agreement.

They could be used in all areas of medical incidents at sea – trauma, acute life threatening illness, minor injuries and less severe and immediate illness. It may be possible to adapt treatment pathways that are currently available for use in other settings eg walk in centres, the military, pre hospital care. However it would need to take into consideration the training and skill level of a seafarer and the logistics of a ship at sea.

These should be simple and relevant to what the seafarer encounters. They should be available in different languages. Provision should be made for standardized collection and documentation of information for transmission to TMAS. Pathways may be particularly useful to guide care up to the point of contact with TMAS and in alerting seafarers to 'red flags' (conditions or presentations of illness or injury which may be life or limb threatening) and when to seek further assistance. They will need to extend past the first recommended point of TMAS contact in case this is not possible.

Should be symptom based and aimed at practical case handling rather than diagnosis.

Training

Training needs to be based around the treatment pathways and there is a need to train the trainer in their use as well as the seafarer and the TMAS staff. More regular and in depth training is required anyway and the introduction of treatment pathways should not have a huge impact on this. Training should be supported by e-learning and practical drills to ensure the maintenance of skills and knowledge. Clinical cases and scenario training should be incorporated into the training.

Training is an essential component and implementation of pathways should start there.

Medical chest and equipment

The contents of medical chests must be reviewed, their contents and presence on board regulated and standardized. Any review should be guided by the treatment pathways but also by input from TMAS providers.

Medical guide

The pathways must be supported by additional information in the form of a manual.

The medical guide should be an international publication based on best practice. There should be one international guide only. There are many lessons that can be learned from publications already available within the medical field.

The use of IT systems should be maximised in the delivery of information but we still need a hard copy.

TMAS

The increased use of written emails, pictures and video consultations where appropriate would help to reduce misunderstanding in communication particularly now satellite communication has been improved.

Potential challenges to overcome

Note: It is essential to engage all interested parties at an early stage.

Economic

It will be necessary to demonstrate financial benefits to the interested parties. This system should decrease the current harmful and wasteful variation in practice eg a reduced number of evacuations and diversions, improved health care outcomes for seafarers with reduced insurance claims and safer ships.

The sale of a medical guide is revenue generating for maritime nations, this needs to be addressed should the guide be produced internationally.

Cultural and political

Nations would need to sacrifice a certain amount of autonomy in order to adopt an international system.

Regulatory

A change to the regulations resulting from cooperation and collaboration of the international agencies is essential. Other sectors of the industry also need to recognize the importance of this area and that change is needed.

The next steps

This consensus statement was agreed by all those present. A full report will be compiled, agreed by all and published within two months.

After wider discussion a working group will need to be established with clear guidelines and timelines. A reference group will also need to be established with representatives from the relevant international agencies, social partners and national maritime authorities in an appropriate timeline.

Research is necessary to establish the numbers and types of cases that the seafarer encounters. This can guide the priorities for pathway development and for training.

Any new system of medical incident handling must be reviewed on a regular basis with appropriate audit, feedback and research. Quality assurance and enforcement is key to the success of any system.