

Mapping the knowledge base for maritime health: introduction

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Priorities for improving maritime health, and hence the allocation of resources to them, should depend on estimates of the frequency and severity of health risks and on estimates of the effectiveness of the available interventions in reducing the impact of illness and injury. They need to address two questions: 'what matters?' (the risks) and 'what works?' (the interventions). Much current maritime health practice is based upon estimates of risks and effectiveness that are of limited validity because good quality evidence has not been collected and analysed. The purpose of this series of articles is to review the current state of knowledge on the scale of risks and on the effectiveness of interventions. The feasibility of improving the knowledge base and the practicability of analysing the available evidence and presenting it in ways that makes the case for more rational resource allocation to improve maritime health is discussed.

This four-part review is structured to first examine the historical development of knowledge about maritime health risks and interventions, using the UK as a case study. This is relevant because of the early development of the UK merchant fleet, and the early growth in concern about the health of seafarers there. A national approach may also challenge historians from other maritime nations to undertake and publish comparable analyses. This analysis also provides the basis for proposing a framework for presenting the various types of evidence about disease, the settings where it may be collected, and how it has been used. The presentation and discussion of this framework is the subject of the second article. The framework will form the basis for the two following articles. One reviews evidence about illness in seafarers and how this may be used to aid prevention and risk management. The other will look at the available knowledge about the relationship between health related impairment and maritime incidents and accidents. Analysis will concentrate on the crews of merchant vessels and is largely based on English language articles

– again a challenge to others to supplement the knowledge base from other sources whenever possible.

The impetus for preparing these articles came from the author's concerns in recent years that much of the advice given on the health of seafarers lacked a valid foundation of evidence and that much of the 'knowledge base' was little more than a summation of the experiences of maritime health practitioners, to which he was adding yet more unsupported items! In addition, representatives of the World Health Organisation upset many maritime health practitioners by saying that there was insufficient valid data to prepare an evidence based list of medications and the quantities required for use at sea, a view that, while unpopular with those in maritime health, was essentially correct.

Two further contributions were, first, a period spent doing a postgraduate course in maritime history, where the interplay of interest groups concerned about the health of seafarers was one of his chosen topics for study. Their behaviour a century ago and now is remarkably consistent, even if the topics at issue and the available technologies to manage them have changed! Second, a publication from the remote medicine and repatriation company 'International SOS' showed how an easily understood and compelling case for corporate action to reduce risks could be made simply by analysing the clinical information they held in terms of the frequency, severity, and cost of the cases they handled at different locations in the world [1]. This led him to question why maritime health practitioners could not do the same. The answer was that this important and potentially empowering information was one of the weakest aspects of the maritime health knowledge base, and one that cried out for remedy.

REFERENCES

Executive Report: International SOS case trends in the energy, mining, and infrastructure sectors. 2009, International SOS, London 2008.

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