

The role of pharmacists in global maritime health

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Maritime health comprises a wide range of disciplines committed to improving the health of seafarers locally and internationally [1]. The maritime sector plays a key role in the global economy as this sector accounts for 80% of global trade [2]. This has led to the development of maritime health laws and regulations by international organizations including the World Health Organization (WHO), International Maritime Organization (IMO), and International Labour Organization (ILO) [1]. Although over one million maritime workers are employed across the globe, evidence revealed that they have limited access to timely healthcare services because most of their working lives are spent off shore and are sometimes classified as "hard-to-reach groups" [2, 3]. The health of mariners has therefore continued to receive comparatively little attention because of the nature of their job.

There has been significant evidence that a high amount of resistant bacteria is found in seas and oceans [4]. This evidence can be attributed to the extensive use of antibiotics in the treatment of sea animals by aquaculture industries [5]. With this fact, seafarers may be the means of transmitting previously known and unknown illnesses across national and continental borders. Thus, there is an urgent need for global maritime health to be treated as an important aspect of global health.

Pharmacists have a vital role to play in global maritime health by monitoring the supply of medicines to ships as well as ensuring the medicines are labelled with appropriate data. In addition, pharmacists can also advise shipping companies and captains on medicines to include in the medicines chest. Since pharmacists are not required by law to be on board [6], pharmacists can be tasked with the responsibility of conducting proper training of personnel responsible for healthcare on board such as the captain or any member of the crew. Self-medication has also become the way of treating illnesses and disease conditions amongst seafarers [7]. The inaccessibility of the seafarers to adequate, reliable, and up-to-date drug information on the internet due to poor network connection also allow them to make less-informed decisions. Pharmacists can help in this regard by organizing awareness campaigns among sailors to educate them about the consequences and dangers of self-medication.

Also, in the preparation of national regulations and national policy for the supply of ship's pharmacies, pharmacists can serve as key advisors. Another means to further address maritime health concerns is via telehealth [6]. Telehealth applications and software like Pharmacy Ships (PARSI) and TelePharmaSea already exist. Pharmacists' help to control the information in the software, perform a digital review of medicines inventory as well as generate e-certificates of compliance [8].

These roles are necessitated in maritime health and the integration of pharmacists will undoubtedly reduce the burden on other health professionals, facilitate effective and efficient healthcare delivery services at sea. Pharmacists and other health professionals will continue to play a huge role in maritime health and therefore, they should be abreast of new development and information in maritime health to facilitate efficient and timely health services. Also, concerted efforts should be made worldwide to increase accessibility to medical care for seafarers.

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