

Self-medication practices among seafarers: a bibliometric review

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ABSTRACT

Self-medication could be a public health concern if done inappropriately, and additional research is required to better comprehend the population-wide nature of the problem. Seafarers are more inclined to self-medicate due to the nature of their work. We performed a rapid bibliometric analysis to determine the volume of research on self-medication habits among seafarers. Our analysis revealed a major knowledge gap regarding self-medication practices among seafarers. There is an urgent need to address this paucity of data and formulate appropriate interventions.

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Key words: seafarers, self-medication, public health

Inappropriate self-medication is a public health concern, and more research is needed to better understand the scope of the problem across populations [1]. Because of the nature of their work, seafarers are more likely to self-medicate. The strict application of medical standards to seafarers has two significant implications for scientific inquiry. First, identifying occupational health issues related to seafaring is extremely difficult because any study of seafarers will not reveal unhealthy seafarers, but rather the opposite (all sick seafarers having been “grounded”). Second, sailors are likely to be extremely hesitant to report health problems for fear of ‘discovery’ consequences. They run the risk of being repatriated and losing their possibilities for a career at sea if they disclose a personal health concern to a researcher and it is later reported to their employer. These points further lend credence to

possibility of increased and underreported inappropriate self-medication practices among seafarers.

We conducted a rapid bibliometric review to gain an understanding of the volume of research output on self-medication practices among seafarers. We searched the title, abstract, and keywords of articles in Web of Science and Scopus using the keywords “seafarers” and “self-medication” without regard to date, year, or language. Despite the dangers of self-medication among seafarers, no original research was found in the database. The only article found was correspondence that did not provide original data but only argued the need to take actions regarding the dearth of information on the misuse of antibiotics and other antimicrobials among seafarers [2]. This adds to the evidence of disparities in health research output in the maritime sector.

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To gain a broader perspective on the topic, we also searched Google scholar for articles indexed in the database between January 1st, 2020, and September 6th, 2022, using the keywords “seafarers” and “self-medication” without regard for language. Despite the widespread misuse of medications during the coronavirus disease (COVID-19) pandemic [3], we found no original data contribution on the topic in a peer-reviewed journal. However, we found two non-peer-reviewed old reports on self-medication practices among seafarers using Google Scholar without any date restrictions [4, 5].

According to one of the studies [4], 63% (650) of seafarers reported having taken at least one non-prescription medication or herbal cure at sea over the preceding 12 months. Similarly, 58.8% (603) of respondents reported practicing self-medication while on leave. The most commonly used self-medication drugs at sea were vitamins or supplements (53.2%), followed by pain killers (26%). The second study [5] revealed that seafarers also reported using self-prescribed medications less frequently in 2016 compared to 2011; their mean self-medication score decreased from 1.0741 in 2011 to 0.7911 in 2016 (an independent t-test revealed a significant difference [$p = 0.000$], and Cohen’s D revealed a small/medium effect [0.28]).

Self-medication practices have numerous potential risks and negative outcomes, including incorrect self-diagnosis, delays in seeking medical advice when needed, infrequent but severe adverse reactions, dangerous drug interactions, incorrect method of administration, incorrect dosage, incorrect choice of therapy, antimicrobial resistance, masking of a severe disease, and the risk of dependence and abuse, among others [6]. With the importance of the work of seafarers and the already existing risk of diseases among seafarers, immediate action is required. This situation highlighted the critical roles of pharmacists and Telemedical Maritime Assistance Service (TMAS) in the maritime industry [7, 8]. Due to a weak network connection, seafarers are unable to get adequate, trustworthy, and current drug information online, which causes them to make less educated

decisions. Pharmacists and TMAS can assist with this by setting up awareness programmes among sailors and other seafarers to inform them of the negative effects and risks of self-medication. In addition to this, TMAS can serve as an opportunity to disseminate drug and medicine information to seafarers leveraging on the digital technologies.

There is an urgent need for recent large-scale research on this topic. Understanding the current landscape of the issue will help to drive strategies and interventions to reduce medication misuse among seafarers.

Conflict of interest: None declared

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