## Oman Vision 2040: Time to Upgrade Occupational Medicine

Yaqoub Al Saidi<sup>1\*</sup>, Faisal Al Badri<sup>2,3</sup>, Fatma Al-Hakmani<sup>4</sup> and Abdulaziz Al-Mahrezi<sup>1</sup>

<sup>1</sup>Department of Family Medicine and Public Health, College of Medicine and Health Sciences, Sultan Qaboos University, Muscat, Oman

## ARTICLE INFO

Article history:

Received: 16 December 2022 Accepted: 17 January 2023

## ONLINE:

DOI 10.5001/omj.2023.92

ost workers spend a third of their lives in their workplaces, potentially exposing them to varying types and levels of occupational hazards. Every year workplace-related diseases cause more than two million deaths globally, in addition to over 320 000 fatalities from workplace accidents. Thus, 5–7% of all deaths worldwide are work-related, outnumbering those from road accidents, war, violence, and AIDS.

In addition, each year 374 million non-fatal work-related injuries and illnesses impact workers and their families and shave off almost 4% of the global GDP.<sup>2</sup> Despite occupational health and safety laws and improvements in working environments, workers in many countries—especially those undergoing rapid industrial growth—still remain exposed to occupational hazards.<sup>1</sup> Occupational factors are responsible for causing 37% of back pain, 16% of hearing loss, 13% of chronic obstructive pulmonary disease, 11% of asthma, 8% of all injuries, 9% of lung cancer, 2% of leukemia, and nearly all cases of pneumoconiosis, worldwide.<sup>4</sup>

Countries with rapid economic growth, such as Oman, are especially vulnerable to occupational diseases. The Oman 2040 National Plan has focused on speeding up the growth of the industrial sector. This means that the public health sector in Oman needs to be prepared to manage a commensurate increase in occupational diseases and injuries.

However, the nation's occupational health regulations are outdated and services are fragmented.<sup>6</sup> Due to a lack of reliable data, occupational health statistics do not figure in our official reports.<sup>6</sup> The

existing occupational health facilities are confined to large organizations that tend to prioritize delivering primary care, assessing employees' fitness to work and, excluding those with clinical conditions that may increase the financial cost to the employer or pose health and safety risks at the workplace. Low priority is given to health conditions caused by or aggravated by work hazards.

Further, workers of small and medium enterprises, bereft of dedicated occupational health services, depend on primary care centers or private clinics. The clinicians at these centers tend to be untrained in occupational medicine, mainly due to inadequate training in medical colleges on the principles of evaluating medical fitness and return to work.<sup>7,8</sup> Yet they are assigned the task of being gatekeepers of social security to ensure that sickness benefits are provided based on medically valid reasons. Not unexpectedly, their decisions tend to be below bestpractice quality. Oman's medical schools do not offer dedicated occupational medicine teaching and lack occupational medicine units, even though multiple international and national organizations have emphasized the importance of including occupational medicine in undergraduate medical curricula,<sup>9,10</sup> amply supported by research.<sup>10-12</sup> With non-occupational physicians responsible for occupational health decisions, work-related medical cases in Oman tend to be underreported, their causes and risk factors are misattributed, resulting in potential mismanagement of cases.

This brings us to the third problem—poor quality occupational health data emanating from health care centers. In addition, the low importance

<sup>&</sup>lt;sup>2</sup>Occupational Medicine Department, Armed Forces Hospital, Muscat, Oman

<sup>&</sup>lt;sup>3</sup>Medical Fitness Department, Armed Forces Medical Services Headquarter, Muscat, Oman

<sup>&</sup>lt;sup>4</sup>Department of Environment and Occupational Health, Directorate General for Diseases Surveillance and Control, Muscat, Oman

given to this field has resulted in a dearth of research on occupational health in Oman, partially due to a lack of funding and other logistic issues. This in turn hampers policymakers from upgrading occupational medicine regulations and infrastructure to meet the growing needs.

To meet the challenge of Oman Vision 2040, the aforesaid three problems that stifle the field of occupational medicine must be tackled. We urgently need a modern comprehensive code of occupational health and safety under the auspices of the health and labor authorities. We also suggest establishing occupational medicine center responsible for studying and monitoring the working conditions and workers' health in both organized and unorganized sectors, overseeing the training of medical students and doctors, linking working conditions and processes to workers' health, and managing individual cases.<sup>13</sup>

This initiative should be three-dimensional, each dependent on the others: (a) physicians trained in occupational medicine should provide employee clinical services; (b) occupational medicine should be added to Oman's medical curricula at preclinical, clinical, and postgraduate levels; training courses should be conducted for practicing physicians; and (c) research in occupational medicine should be encouraged with adequate facilities and funding.

First, specialized clinical occupational health services should be established. They should be accessible to all workers irrespective of where they work, and where employers can refer them. To overcome possible bias and financial burden to the public sector, it can be a third-party service paid for like the social insurance authority through workplace premiums.

Second, the shortage of occupational medicine physicians should be rectified. Occupational medicine modules need to be included in our preclinical, clinical, and postgraduate curricula. We also recommend that all physicians working in Oman, irrespective of their place of work or seniority, acquire expertise in managing occupational diseases. This will ensure that all physicians are able to take comprehensive occupational history, recognize hazards associated with different professions and workplaces, possess decision-making abilities to certify patients' fitness to return to work, communicate effectively with employers and employees to advise about risk control and

accommodations, have insight into the legal aspects, and manage the ethical aspects of work-related health and quality of life.

Third, research on occupational health needs to be encouraged. As occupational medicine physicians, we believe there are several pressing topics of research on this subject, but funding is needed to conduct research projects locally or in collaboration with international institutions. Furthermore, researcher availability, occupational research centers, availability of occupational medicine clinics, and dedicated time for clinicians to conduct research are also required. It was evident during the COVID-19 pandemic how crucial occupational health research was when many healthcare and non-healthcare workers were infected at their workplaces.

To conclude, occupational medicine has been poorly represented in Oman and urgent revamping is called for. The approach suggested above may help meet today's requirements as well as those of Oman Vision 2040.

## REFERENCES

- Rushton L. The global burden of occupational disease. Curr Environ Health Rep 2017 Sep;4(3):340-348.
- International Labour Organization. The prevention of occupational. 2013 [cited 2022, September 17]. Available from: https://www.ilo.org/wcmsp5/groups/ public/---ed\_protect/---protrav/---safework/documents/ publication/wcms\_208226.pdf.
- Snashall D, Patel D. ABC of occupational and environmental medicine, 3rd Edition. Wiley; 2013.
- Fingerhut M, Nelson DI, Driscoll T, Concha-Barrientos M, Steenland K, Punnett L, et al. The contribution of occupational risks to the global burden of disease: summary and next steps. Med Lav 2006;97(2):313-321.
- Vision 2040 special edition. The Business Year: Oman 2021/22pdf. 2021 [cited 2022 December 15]. Available from: https://www.nama.om/media/1469/om211.pdf.
- Watfa N. The national occupational safety and health profile of the Sultanate of Oman. Minist Man power Collab with Int Labor Organ; 2009.
- Löfgren A, Hagberg J, Arrelöv B, Ponzer S, Alexanderson K. Frequency and nature of problems associated with sickness certification tasks: a cross-sectional questionnaire study of 5455 physicians. Scand J Prim Health Care 2007 Sep;25(3):178-185.
- Arrelöv B, Alexanderson K, Hagberg J, Löfgren A, Nilsson G, Ponzer S. Dealing with sickness certification - a survey of problems and strategies among general practitioners and orthopaedic surgeons. BMC Public Health 2007 Oct;7:273.
- World Health Organization. WHO study group on training, education in occupational health. Training and education in occupational health: report of a WHO study group. World Health Organization; 1988.
- Wynn PA, Aw TC, Williams NR, Harrington M. Teaching of occupational medicine to undergraduates in UK schools of medicine. Occup Med (Lond) 2003 Sep;53(6):349-353.

- 11. Shanahan EM, Murray AM, Lillington T, Farmer EA. The teaching of occupational and environmental medicine to medical students in Australia and New Zealand. Occup Med (Lond) 2000 May;50(4):246-250.
- 12. Garg A, Mulloy KB. Developing a problem-based
- learning approach to the integration of environmental and occupational health topics into medical school curriculum. J Occup Environ Med 2018 Aug;60(8):754-759.
- 13. Treasury HM. Review of ill health retirement in the public sector. London: HM Treas; 2000.

