



# Sudden death among young Sudanese physicians: a wake-up call

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Dear Editor,

The death of any individual is distressing. This is even more so when the death is unexpected. The recently updated Geneva declaration emphasizes that physicians should attend to their own health and well-being both as physically and mentally in order to give the highest quality of care<sup>[1]</sup>. During the last 5 years, sudden death has frequently been observed among young Sudanese physicians. Sudden death among young Sudanese physicians in recent years shocked the public and the profession and became a trend in social media. Unfortunately, there are no existing clinical reports about sudden death among young Sudanese physicians and medical staff.

A heavy workload (including shortage of staff, long shift work, and high patient load) has been common across the globe and over many decades in the medical field<sup>[2]</sup>. In eastern Asia, including Japan, South Korea, Taiwan, and China, 'karoshi' (overwork death) is a growing public health problem<sup>[3]</sup>; it is a term that Japanese scientists first used in 1978 to describe deaths because of work overload<sup>[4]</sup>. Long work hours are associated with sleep disturbance, depression, and substance abuse<sup>[5]</sup>. In Sudan, work hours can be extended for more than 24 h per shift. Sudanese physicians, particularly those who specialize in surgery and operative care, work longer hours and are exposed to higher overloads, which could be the main cause of death.

Most of the Sudanese doctors neglect to have regular medical checkup, which results in the late detection of some potential diseases such as diabetes mellitus and hypertension. Before entering university, all Sudanese medical students underwent preadmission medical checkup; in contrast, there is no medical checkup before starting an internship or training program. Structural heart diseases and cardiac arrhythmias are the most common causes of sudden cardiac death. Similarly, it is becoming increasingly widely accepted that non-cardiac diseases such as

epilepsy is linked to a higher risk of sudden cardiac death, most commonly through affecting cardiac electrophysiology. Interestingly, recent data revealed that sudden cardiac death is a leading cause of death in epileptic patients<sup>[6]</sup>. Pre-internship and residency program medical checkup can aid in the early detection of some potential risk factors of sudden unexpected cardiac deaths, such as structural heart disease, arrhythmias, and epilepsy. Those who are at risk of sudden cardiac death can be advised to avoid specialties with high workload, such as surgery and emergency medicine.

The rate of occupational burnout, which is a three-dimensional syndrome caused by exposure to chronic interpersonal stressors on the job, is increasing among physicians globally<sup>[7]</sup>. A recent cross-sectional study conducted among resident physicians in Sudan revealed that 13.9% had burnout in all three dimensions, while 70.7% suffered high levels of emotional exhaustion, 44.2% showed high levels of depersonalization, and 73.1% had a decreased sense of professional accomplishment<sup>[8]</sup>.

One out of every two Sudanese doctors has faced violence at some point of time in their life, whether it was physical, psychological, or both<sup>[9]</sup>. The frequency of violence has been aggravated by the coronavirus disease-2019 pandemic<sup>[10]</sup>. Sudanese physicians spend a considerable proportion of their lifetimes at work. It is crucial that the workplace has elements that support and give physicians a sense of value; the issue of mobbing, which is one of the issues at work, has received more attention recently. An employee or group that has been emotionally harassed, offended, and ultimately rendered nonfunctional by coworkers, colleagues, or superiors is said to have been mobbed<sup>[11]</sup>. The phenomenon of mobbing is associated with psychological stress and low job satisfaction.

The low salary can lead to a financial burden on Sudanese resident physicians and makes them work longer hours in private hospitals or clinics to cover their daily living expenses and support their families. Sudan currently faces a severe economic crisis. Economic and social factors were also strongly correlated with the incidence of sudden death.

Physical inactivity raises the risk of ischemic heart disease<sup>[12]</sup>. Lack of time due to heavy workload is the most hindering factor for the practice of regular physical activity among young Sudanese physicians.

Unhealthy stress-relieving behaviors such as smoking have an impact on physicians' health. Smoking can trigger myocardial infarction in individuals with minimal atherosclerosis or even with normal coronary arteries, especially young patients<sup>[13]</sup>.

Poor dietary habits can negatively affect the well-being of Sudanese physicians. It is well known that bad eating habits, including an inadequate or unbalanced diet, have a significant negative impact on human health. Poor dietary habits are

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Sponsorships or competing interests that may be relevant to content are disclosed at the end of this article.

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Annals of Medicine & Surgery (2023) 85:78–79

Received 26 October 2022; Accepted 25 December 2022

Published online 1 February 2023

<http://dx.doi.org/10.1097/MS9.000000000000174>

associated with serious health conditions such as metabolic syndrome, type 2 diabetes, increased risk of cardiovascular diseases, and obesity<sup>[14]</sup>.

Most of the Sudanese physicians ignore taking their regular annual leaves, which is vital to promote good physical and mental health. Middle-aged males are at high risk for coronary heart disease compared to those who take regular annual vacations; the latter group has a lower risk of death from any cause and, more particularly, death from coronary heart disease<sup>[15]</sup>.

Sudanese physicians should pay more attention to their own health. Instead of excessive smoking, they could engage in regular aerobic activity or stay in touch with their relatives and friends for support. Additionally, a regular medical checkup is a successful strategy to lower the risk of several serious disorders like coronary artery disease, diabetes mellitus, and hypertension. Postgraduate deans, medical boards, and the ministry of health have a major role in reducing sudden death in young Sudanese physicians through encouraging and facilitating regular medical checkup before entering internship and training programs, increasing salaries and wages, providing a healthy environment that allows physicians to work in a healthy and effective way through standardizing the number of night shifts and working hours.

### **Ethical approval**

None.

### **Sources of funding**

The author received no specific funding for this article.

### **Authors' contribution**

The author conceptualized, wrote, and revised the paper. The author agrees with and approves the final publication of this article.

### **Conflicts of interest disclosure**

The author declares no conflict of interest.

### **Research registration unique identifying number (UIN)**

None.

### **Guarantor**

O.A.M.A. Elawad.

### **Patient consent**

None.

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