

UNIVERSITI TEKNOLOGI MARA

**WORK-RELATED STRESS AND ITS ASSOCIATED
FACTORS AMONG PRIMARY CARE DOCTORS IN
MALAYSIA DURING THE COVID-19 PANDEMIC**

MUHAMMAD SHAH BIN SHAHRUDIN

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ABSTRACT

Background: In Malaysia, the recent COVID-19 pandemic had increased the workload of all health professionals, especially primary care doctors (PCDs). Hence, this study aimed to determine the level of work-related stress and factors associated with higher levels of work-related stress among PCDs in Malaysia during this pandemic.

Method: A cross-sectional survey was conducted online using Google Forms™. Sociodemographic as well as work and workplace data were collected. The Job Demand Inventory, Physicians' Lack of Professional Autonomy, and Health Professions Stress Inventory questionnaires were used to assess the job demand score, job autonomy score, and the level of work-related stress, respectively. Multiple linear regression was performed to determine the significant factors associated with higher work-related stress.

Results: A total of 301 PCDs participated in this study with the majority being female (76.1%), Malay (67.8%), married (73.1%), medical officers (68.8%), and worked in urban (70.4%) and public primary care clinics (83%). The mean (SD) score for work-related stress was 62.8 (18.4), (score range 0-120). PCDs who had any degree of worry about being alienated by friends and relatives because of close contact with COVID-19 patients had higher work-related stress levels compared to PCDs who did not have any worry [rarely ($b=10.23$, 95% CI:5.57, 14.89), sometimes ($b=10.41$, 95% CI:5.68, 15.13), often ($b=10.12$, 95% CI:4.16, 16.08), and always ($b=14.65$, 95% CI:7.43, 21.89)]. The other significant factor was higher job demand scores ($b=1.13$, 95% CI:0.91, 1.35). In contrast, PCDs who always received support from supervisors at their workplace were found to have lower work-related stress levels compared to those who did not receive any support ($b=-5.65$, 95% CI:-10.38, -0.93).

Conclusion: The level of work-related stress among Malaysian PCDs during the COVID-19 pandemic was higher compared to American PCDs and Malaysian physicians before the pandemic but lower compared to Australian emergency physicians during the pandemic. Urgent measures to address the above-mentioned associated factors should be implemented as another pandemic may be just around the corner.

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CHAPTER I

INTRODUCTION

According to the United States' National Institute of Occupational Safety and Health (NIOSH), work-related stress or job stress is defined as the harmful physical and emotional responses that occur when the requirements of a job do not match the capabilities, resources, or needs of the worker [1]. A study in Canada found that the prevalence of work-related stress among healthcare workers (HCWs) and the general population was around 45% and 31%, respectively [2]. The same study revealed that the prevalence of stress was higher ranging from 58% to 64% specifically for family physicians, specialist physicians, laboratory technicians and nurses. In Nigeria, the most stressful area of specialisation reported among doctors was radiotherapy with the prevalence of 66.7% [3]. This was followed by surgery (60.0%), obstetrics and gynaecology (58.3%), internal medicine (53.9%), ear, nose and throat (42.8%), ophthalmology (40%), primary care (33.3%) and paediatrics (31.8%) [3]. In contrast, a study done in Jordan found that compared to other physician groups, primary care physicians had a higher prevalence of work-related stress [4]. Nevertheless, primary care practice has been an increasingly stressful field in medicine according to several studies [5-7].

Studies had shown that prolonged work stress is the major reason for work-related delay, absenteeism, hypertension, musculoskeletal disorders, cardiovascular disorders and substance use [8-11]. On top of that, it is a major cause of mental disturbance and staff turnover [9, 10]. It also reduces organizational commitment, job satisfaction, quality of care and organizational productivity [12-16]. There were also evidence linking work-related stress to suicide [17, 18]. A narrative review on the topic of ‘suicide among doctors’ found that suicide risk among doctors is believed to be five to seven times higher than in the general population [19]. Anaesthesiologists, general practitioners, and psychiatrists are common specialties with high suicide rates [19]. Being a primary care physician is a stressful job that can lead to high burnout rate [20]. To a lesser extent, repercussions on the quality of patient care, medical errors, and patient–physician relationships had been reported [21-24].

On March 11, 2020, the World Health Organization (WHO) declared Coronavirus Disease 2019 (COVID-19) to be a pandemic [25]. This pandemic had increased the workload of most health care workers including PCDs. A study in Spain found that the workload of