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Introduction

Shift work is a common feature in various economically developed countries like Canada, the United Kingdom, France, Russia, and Malaysia. However, it often brings about mental health issues, fatigue, physical ailments, household disorganization, and strained

of 40 (89.1%), as individuals typically ascend to senior positions and transition to office-hour schedules after this age. Notably, the emergency room was the primary department introducing three-shift work, accounting for the majority of participants.

Several studies conducted during the pandemic have identified alarming levels of psychological distress in communities, potentially linked to factors such as loss of family members, travel restrictions, work disruptions, and financial challenges stemming from COVID-19. Given these themes, it was deemed pertinent to investigate the psychological impact of the pandemic on frontline healthcare shift workers who have been grappling with its disruptive effects [8]. Research on healthcare workers' working hours during the pandemic has indicated that longer shifts are associated with heightened levels of burnout and stress, compounded by prolonged contact with patients or specimens, extended periods of PPE use, sleep deprivation, and suboptimal dietary habits. These psychological effects can be exacerbated by various risk factors, including gender, health status, economic standing, and occupational disparities.

Study design and subjects

This cross-sectional study enrolled healthcare workers aged 19 to 60 years who were employed at hospitals in the Klang Valley region of Malaysia and directly managed COVID-19 cases by working a minimum of three shifts per year. The study included participants from hospitals across the Klang Valley, selected due to the region reporting the highest number of COVID-19 cases in the country. Among the 14 public hospitals listed in the Klang Valley, only those directly involved in treating COVID-19 cases were included. Participants were recruited randomly using a stratified random sampling technique.

Inclusion criteria comprised proficiency in Malay or English and Malaysian citizenship among medical staff, while individuals diagnosed

from a previous study conducted among medical professionals in China during the COVID-19 outbreak [9]. Our research identified several factors associated with mental health outcomes. Being married and having children were associated with lower scores on mental health measures, while younger age, female gender, less experience, and frontline work were associated with higher scores. Additionally, living with a spouse or children was linked to lower scores compared to living alone. Regression analysis revealed that being female, young, having a history of mental illness, and frontline work were independent predictors of poorer mental health across various measures. Similar to findings from other studies, excessive workload was associated with psychological symptoms. Efforts should be made to ensure reasonable working hours, adequate rest periods, and rotating shifts for healthcare workers. Additionally, logistical support, including access to personal protective equipment and safe working environments, is crucial for mitigating negative emotions such as lethargy, hopelessness, and guilt. Our results also highlighted the importance of peer and supervisor support in promoting psychological well-being. Providing opportunities for healthcare workers to discuss their experiences, share concerns, and receive support can help alleviate feelings of loneliness and stress. Clear guidelines and protocols for job preparation, disease information, and self-protection measures are essential for boosting confidence and reducing stress among frontline workers [10].

Conclusion

In conclusion, our study underscores the significance of sleep quality, physical activity, and dietary habits in the mental health of medical shift workers. Addressing these modifiable factors can contribute to the psychological well-being of healthcare workers during the COVID-19 pandemic. Future research should focus on longitudinal studies to confirm the causal relationship between these factors and mental health outcomes among shift workers, guiding the development of interventions and health policy directions in the workplace.

Acknowledgement

None

Conflict of Interest

None

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