COVID-19 IN HEALTH CARE WORKERS: PSYCHOLOGICAL DISTRESS AND ITS CORRELATES AMONG SURVIVORS FROM THE SUNGAI CLUSTER

Author: Dr. Wan Mohd Rushidi Haji Wan Mahmud - Consultant Psychiatry & Neuro Behavior
Co Author: Mdm Nor Ashikin Ibrahim – Deputy Quality Manager
Kedah Medical Centre

KEDAH MEDICAL CENTRE
Member of KPJ Healthcare Group | Subsidiary of Perbadanan Kemajuan Negeri Kedah

Abstract

The COVID-19 pandemic has profoundly impacted global mental health, especially among healthcare workers (HCWs). A study focusing on Malaysia's Sungai Cluster outbreak within a private medical center revealed that HCWs faced significant stigma and challenges when returning to work after infection. They lacked adequate informational and psychosocial support, relying on each other and spirituality. Among 24 HCWs, 33.3% exhibited psychological distress, correlating with general health and reported problems. Qualitative analysis identified themes of initial negative emotions, pervasive stigma, and insufficient support. Addressing these issues is vital for safeguarding HCWs' mental health during and after COVID-19 infection. HCWs are the internal patients of the hospital that needed to be taken care of.

A cross-sectional mixed-method study was conducted among HCWs from a private medical centre within the Sungai Cluster. Participants completed questionnaires on demographics, distress levels, and general health. Subsequently, they underwent psychiatric evaluation either individually or in small groups. Quantitative data were analyzed using SPSS, while qualitative data underwent content analysis.





Contact

Dr Wan Mohd Rushidi Haji Wan Mahmud
Pn Nor Ashikin Ibrahim
Organization Name : Kedah Medical Centre
drwanrushidikmc@gmail.com
ashikinibrahim@kpjkmc.com
04-7308878
https://kpjhealth.com.my/kedah/

Introduction

- Globally, mental health is being challenged like never before by Covid-19. Whilst there are many uncertainties about how the pandemic will progress, what is clear is that the impact on the mental health and psychosocial well-being of those affected will be significant.
- The Sungai Cluster was one of the few clusters in Malaysia which involved HCWs. The index case was first identified on September 6, 2020, and the cluster listed 101 positive individuals with one death.24 of them were HCWs.
- The aims of the study were:-

Impact on mental health:
Healthcare workers are at the frontline of the battle against COVID-19 and face unique stressors and challenges during the pandemic. E.g., exposure to high-risk situations, fear of infection, and witnessing the suffering of patients/ own family members.

Understanding the prevalence and severity of distress:
The study can help determine the prevalence and severity of psychological distress among healthcare workers who were affected by the Sungai Cluster.

Developing interventions and support systems:
The findings of the study can inform the development of interventions and support systems tailored to the needs of healthcare workers who survived the Sungai Cluster.
E.g. mental health counselling, peer support programs, stress management workshops, and promoting a positive work environment.

Informing future preparedness and response:
Research on the psychological distress experienced by healthcare workers during the Sungai Cluster can contribute to the understanding of the broader impact of the pandemic on healthcare systems.

Methods and Materials

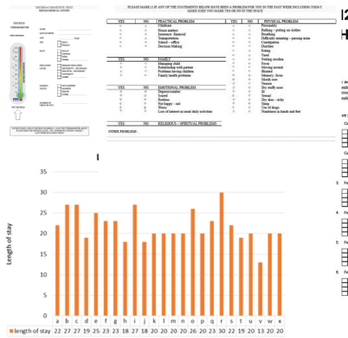
- This is a cross-sectional mixed-method study. The sample consisted of HCWs from a private medical centre within the Sungai Cluster admitted to two nearby general hospitals designated or Covid-19 treatment (Hospital A: N= 23; Hospital B: N=1; Total N = 24)
- Initially, participants were given a set of questionnaires consisting of
(a) demographic details
(b) the Malay version of the Distress Thermometer (DT) and Problems Lists (PL)
(c) 12 items Malay version of the General Health Questionnaire (GHQ-12).
Once completed, the HCWs were invited to attend a session with the psychiatrist, either in small groups or individually (3 groups and 2 individual sessions) as part of a routine psychological evaluation.
- Group sessions lasted between 60 – 120 minutes, whereas individual ones took about 30 – 40 minutes to complete. Semi-structured interviews with key questions were used to help define the areas to be explored including (a) feelings, sources of stress and dissatisfactions (b) worries (c) support received while they were in isolation and on coming back to work.
- Quantitative data was analysed using SPSS Version 26 (IBM SPSS Statistics 26). Content analysis was conducted for qualitative data. Meaningful statements were extracted and themes were formulated. This study was reviewed and approved by the Ethics Committee of Kedah Medical Centre

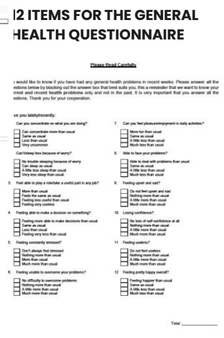
Results

- The study population included 7 male and 17 female HCWs aged between 22-50 years. 16 of them were married (66.7%) and 19 (79.1%) were educated to a least a diploma level. Hospital stays ranged between 13 and 27 days.
- 8 out of 24 of the HCWs scored ≥ 5 on DT giving a prevalence psychological distress of 33.3% (median score = 3.0).
- A significant positive correlation was observed between their DT and GHQ-12 scores (Spearman correlation: rs = p <0.05). Similar relationships were observed between their DT scores and the total number of reported problems on PL (practical, family, emotional and physical problems): (Spearman's correlations: rs of 0.847, 0.584, 0.780 and 0.662 respectively, p<0.001 for all.
- Psychological distress was significantly linked to problems related to child care, decision-making, family health, worry, loss of interest in usual activities, blocked nose, and sleep problems – Fisher's Exact Test (2-sided); p<0.05 (for all)
- Qualitative analyses revealed a few common themes.
Negative emotions stretched from being sad and depressed during the first few days of admission to anxiety and concerns regarding their own health and that of their family members, anger sparked by the spread of false information, rumours and violation of privacies, annoyance from mundane, repetitive questionings on their whereabouts and close contacts from multiple investigators to the trauma of being picked up by ambulance in front of their families and neighbours.

Graphs and Tables

- **DISTRESS/ EMOTION THERMOMETER**
  - Simple rapid modular screening tool for detection and monitoring of emotional disorders in clinical practice.
  - Simple visual-analogue design - single item measure which consists of a thermometer" with numerals displayed vertically from 0 to 10.
  - Created by Prof Alex J Mitchel (2012)
- **DEMOGRAPHIC DETAILS AND PROBLEM LISTS**





Discussion

- The prevalence of psychological distress among HCWs in our study was 33.3% based on a cut score of ≥ 5 on the Malay version of the DT. Not surprisingly, those in the DT distress group endorsed more items on the PL. The relationship between number of items endorsed and risk status may be due to the cumulative effects of multiple problems (2). Additional study is needed to better understand how the quantity and nature of the distressing factors influence the risks for distress.

Negative emotions, overwhelming stigma and ***inadequate*** support were the three main themes identified during our interview sessions. Sahoo S. et al (3) reported similar findings in their cohort of 50 COVID-19 patients are assessed during quarantine and before their discharges. Most of their patients go through the initial emotional reactions of shock, disbelief, sadness and panic/ anxiety. Over the period of hospital stay, they started to feel more relaxed, and gradually their experience with the ward environment changed. Stigma emerged as an important outcome of the Covid-19 infection and despite being provided psychological support, 38% of their patients screened positive for anxiety and disorder and/or depression close to their discharges.

Conclusions

- Covid-19 infection among HCWs is real. They are as vulnerable as any other individuals in this world of being affected by the pandemic

The information obtained from this study could be used as a guide in developing better policies and interventions in order to maintain their psychological well-being both during the quarantine period and upon being released from the wards to resume their day-to-day activities.

- Papoutsi E, Giannakoulis VG, Ntella V, Pappa S, Katsaounou P. Global burden of COVID-19 pandemic on healthcare workers. ERJ Open Research 2020 Jul 6; 6(2):00195-2020.
- Van Hoose L, Black LL, Doty K, Sabata D, Twumasi-Ankrah P, Taylor S, Johnson R. An analysis of the distress thermometer problem list and distress in patients with cancer. Support Care Cancer. 2015 May; 23(5):1225-32.
- 3.Sahoo S, Mehra A, Dua D, Suri V, Malhotra P, Yaddanapudi LN, Puri GD, Grover S. Psychological experience of patients admitted with SARS-CoV-2 infection. Asian J Psychiatry. 2020Dec; 54:102355.