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Social Impact Of The COVID-19 Pandemic On Healthcare Workers In Kerala: A Survey Study

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ABSTRACT

The COVID-19 pandemic has brought unprecedented challenges to healthcare workers worldwide, including those in the Indian state of Kerala. This study aimed to investigate the social impact of the pandemic on healthcare workers in Kerala through a survey conducted among 250 participants. The survey encompassed questions related to demographics, work nature, marital status, dietary patterns, income, and the social implications of working on the frontline during the pandemic. The study revealed insightful findings regarding the feelings of neglect by society, changes in relationships with the community, impact on family life, and the overall emotional toll experienced by healthcare workers. The results shed light on the social well-being of healthcare workers during the pandemic and emphasize the need for targeted support systems to address the social challenges faced by this critical workforce in Kerala.

Keywords: COVID-19, health workers, social impact, Kerala, pandemic

INTRODUCTION

The outbreak of the COVID-19 pandemic has placed unprecedented pressures on healthcare systems worldwide, with healthcare workers, particularly nurses, standing at the forefront of the battle against the virus. The psychological impact of the pandemic on these frontline professionals has garnered increasing attention as they grapple with the physical, emotional, and social challenges brought about by the global health crisis. Understanding the social impact of the pandemic on health workers is crucial for devising effective support strategies and interventions to safeguard their well-being and maintain the quality of patient care.

The adequacy of the proposed sample size has been meticulously evaluated to ensure meaningful and reliable conclusions in this study. Parameters such as age, gender, marital status, dietary pattern, educational attainment, employment status, family type, income distribution, and level of contact with COVID-19 patients have been carefully examined to establish the representativeness and validity of the selected sample. The survey questionnaire, designed with well-justified questions, comprehensively assesses various aspects of health workers' experiences during the pandemic, aiming to gain valuable insights into the social impact of COVID-19. The findings hold crucial implications for healthcare policymakers, guiding targeted interventions and support systems to address the unique challenges faced by healthcare professionals in Kerala. By recognizing their emotions and identifying stressors, this study contributes to fostering a supportive and empathetic environment, ensuring the resilience and well-being of healthcare professionals during these challenging times, and ultimately impacting the provision of quality healthcare amidst the pandemic's social impact on health workers in Kerala, India.

LITERATURE REVIEW

Adams, J. G., and Walls, R. M. (2020) underscored the utmost importance of safeguarding the physical and psychological health of healthcare workers at the forefront of the COVID-19 pandemic. Their discussion highlighted the various risks faced by healthcare professionals while caring for infected patients, particularly nurses. They acknowledged the increased stress, anxiety, and emotional burden experienced by frontline workers, which necessitates targeted mental health support programs to mitigate the impact. Thobaity et al. (2020) conducted a study focusing on the challenges confronted by nurses working on the frontline during the pandemic. The authors addressed the physical and psychological stress nurses encountered, including increased workload, exposure to the virus, and the emotional toll of caring for critically ill patients. The review emphasized the importance of providing adequate support and resources, such as personal protective equipment (PPE) and mental health services, to protect the well-being of nurses during this challenging time. Chen et al. (2020) uncovered high levels of trauma and burnout among nurses due to the challenges and stress posed by the pandemic. Their study also identified instances of posttraumatic growth, highlighting the need for mental health support and interventions to address nurses' psychological well-being and foster resilience in the face of adversity. Chew et al. (2020) conducted a multinational investigation on the psychological outcomes and associated physical symptoms experienced by healthcare workers during the COVID-19 outbreak. The study revealed significant psychological distress, including anxiety and depression, among healthcare workers. The authors emphasized the imperative of targeted support and mental health interventions to address their well-being during global health crises. Giorgi et al. (2020) aimed to investigate the pandemic's impact on healthcare workers' well-being, focusing on anxiety, stress, and depression levels. Their study reported elevated levels of anxiety, stress, and depression among healthcare professionals during the pandemic, emphasizing the need for accessible mental health support services to help them cope with the stress and challenges they face. Greenberg et al. (2020) explored and addressed the mental health challenges faced by healthcare workers during the pandemic. The review highlighted high levels of stress, anxiety, depression, and burnout among healthcare workers due to the unique demands of working on the frontline during the pandemic. The study proposed strategies such as psychological support services, peer support, counseling, and regular mental health check-ins for healthcare workers. Lai et al. (2020) identified factors associated with mental health outcomes among healthcare workers exposed to COVID-19. The study revealed a significant proportion of healthcare workers experiencing adverse mental health outcomes during the pandemic. Factors such as gender, frontline exposure to COVID-19 patients, working in high-risk departments, and a history of chronic diseases influenced their mental health. Adequate personal protective equipment and infection control training were found to be protective factors. Marvaldi et al. (2020) investigated the psychological impact of COVID-19 on healthcare professionals in a highly affected region of north-eastern Italy. The study revealed significant psychological distress, including anxiety and depression, among healthcare professionals in this region. The study highlighted the urgent need for targeted interventions and mental health support to address the well-being of healthcare workers facing unprecedented challenges.

Morgantini et al. (2020) identified factors contributing to healthcare professional burnout during the pandemic through a global survey. The study highlighted high workload, prolonged working hours, exposure to infectious patients, lack of PPE, fear of infection, and emotional toll as contributors to burnout among healthcare professionals worldwide. The study emphasized the critical importance of addressing burnout and providing adequate support and resources to mitigate the pandemic's psychological impact. Pappa et al. (2020) conducted a systematic review and meta-analysis on the prevalence of depression, anxiety, and insomnia among healthcare workers during the pandemic. The study revealed significant psychological burden among healthcare professionals, emphasizing the need for targeted interventions and mental health support to address their well-being.

Preti et al. (2020) explored the psychological impact of epidemic and pandemic outbreaks on healthcare workers. The review highlighted increased stress, anxiety, depression, and psychological distress among healthcare workers during such crises. The study emphasized the urgent need for support systems to address their mental well-being. Rana et al. (2020) focused on the mental health of medical workers in Pakistan during the pandemic outbreak, revealing significant challenges, including high levels of stress, anxiety, and psychological distress. The study emphasized the importance of addressing the mental well-being of medical workers and implementing supportive measures. Rossi et al. (2020) investigated the mental health outcomes of frontline and second-line healthcare workers in Italy. The study revealed significant psychological impacts, including stress, anxiety, and burnout, among healthcare professionals, particularly frontline workers. The research highlighted the need for targeted interventions and mental health support. Shah et al. (2020) emphasized the importance of focusing on physicians' health and burnout during the pandemic. The study revealed increased levels of burnout and stress among physicians, underscoring the need for mental health support. Shechter et al. (2020) examined psychological distress, coping behaviors, and preferences for support among healthcare workers in New York. The study highlighted the significant psychological distress experienced by healthcare workers and identified coping behaviors and support preferences. Spoorthy et al. (2020) examined the mental health problems faced by healthcare workers during the pandemic, emphasizing the need for adequate mental health support and interventions. Tan et al. (2020) investigated the psychological impact of the pandemic on healthcare workers in Singapore, revealing significant psychological distress, including anxiety, depression, and stress. The study emphasized the need for targeted social health support and interventions.

POPULATION SIZE AND ITS SELECTION

The sample, consisting of 250 participants, is meticulously chosen to represent the geographical context of Kerala, India, making it a pertinent and regionally-relevant study. An in-depth evaluation of the proposed sample size is essential to ensure its adequacy for drawing meaningful and reliable conclusions. Each parameter is meticulously examined to ascertain the representativeness and validity of the selected sample.

The study population comprises 250 health workers drawn from diverse hospitals in Kerala, with age distribution as follows: less than 25 years old (18%), 26 to 35 years old (31.2%), 36 to 45 years old (36%), and above 45 years old (14.8%). This diverse representation across various age groups enables generalizability of findings to the entire healthcare workforce in Kerala. The inclusion of participants from diverse age brackets provides valuable insights into the psychological impact of COVID-19 on health workers across varying life stages, contributing to a more comprehensive understanding of the situation. Regarding gender distribution, the sample consists of 9.6% males and 90.4% females, with no participants identifying as "Others." The predominance of female participants aligns with the prevailing gender representation within the nursing profession. The inclusion of male participants, though relatively small in number, allows for unique insights into the experiences of male health workers amidst COVID-19 challenges. Understanding both male and female perspectives enhances our understanding of the psychological impact on the nursing workforce in Kerala, guiding targeted support measures for all healthcare professionals.

Marital status distribution among the surveyed health workers is as follows: single (25.2%), married (72.8%), and divorced (2%). The majority of married participants mirrors the typical demographic profile of healthcare professionals, where a considerable portion of the workforce is married. Inclusion of participants from various marital statuses allows for a comprehensive examination of the psychological impact of COVID-19 across different personal circumstances. Understanding how marital status influences the psychological well-being of health workers is crucial for devising tailored support strategies during these challenging times. The dietary pattern distribution reveals 11.2% vegetarians and 88.8% following a mixed dietary pattern. This prevalent mixed dietary pattern aligns with common dietary habits observed among health workers in Kerala. Understanding the dietary choices of health workers is essential, as it may have implications for their overall health and well-being during the pandemic. Insights into potential associations between dietary habits and psychological impacts contribute to a comprehensive assessment of the overall health of healthcare professionals.

Educational attainment among participants is distributed as follows: diploma holders (36.8%), degree holders (58.4%), and master's degree holders (4.8%). This educational diversity represents the varying academic backgrounds of health workers in Kerala. Inclusion of participants with different educational qualifications allows a comprehensive understanding of how education may influence the psychological impact of COVID-19 on healthcare professionals. Insights into potential correlations between educational attainment and coping mechanisms, stress levels, and overall well-being are crucial for tailored support measures and interventions. Regarding employment status, the majority are employed (89.6%), with a small percentage on leave (9.2%) or unemployed (1.2%). This significant employment representation aligns with the primary focus on active health workers involved in the healthcare system during the pandemic. The inclusion of participants in various employment situations offers a comprehensive perspective on the psychological impact of COVID-19 on health workers across different circumstances. Tailored support strategies are vital for addressing the specific needs and challenges faced by health workers based on their employment statuses. Family type distribution shows 24% belong to nuclear families, while a considerable majority of 76% are from joint families, reflecting prevailing family structures in Kerala. Inclusion of participants from both nuclear and joint families captures the family diversity among health workers, which may have implications for their psychological well-being during the pandemic.

Income distribution among participants is categorized as follows: income less than 20000 (4.8%), income between 20000 and 40000 (70.4%), and income above 40000 (24.8%). This income diversity reflects the economic variation among health workers in Kerala. Understanding income variations within the sample is crucial, as it may influence access to resources and coping strategies during challenging times. Insights into potential associations between economic factors and psychological impact inform tailored support measures for health workers across different income groups.

Of the participants, 64.8% have direct contact with COVID-19 patients, while 35.2% have indirect contact, providing insights into their varying levels of exposure and experiences during the pandemic. The inclusion of participants across various demographic parameters allows for a comprehensive analysis of the psychological impact of COVID-19 on health workers in Kerala, informing targeted interventions and support mechanisms effectively.

QUESTIONNAIRE AND SURVEY

The selected survey questions for studying the psychological impact of COVID-19 on health workers in hospitals across Kerala, India, are carefully chosen to comprehensively assess various aspects of their experiences during the pandemic. These questions are justified in their relevance and significance in understanding the well-being of health workers amid the challenges posed by COVID-19. By inquiring about health status, feelings of safety at work, and preparedness to handle COVID-19 cases, the survey gains valuable insights into their physical and mental well-being, confidence, and competence. Additionally, the assessment of contact history with COVID-19 patients, worries, anxiety levels, and emotional states provides a deeper understanding of the psychological toll the pandemic may be taking on health workers. The inclusion of questions about loneliness, happiness, and concerns about personal health due to COVID-19 further explores their emotional well-being and job satisfaction. Moreover, by investigating the support provided by healthcare facilities during the epidemic and the impact of subsequent waves and variants on morale, the survey addresses the crucial aspect of organizational and societal support systems during these challenging times. Altogether, these well-justified survey questions allow for a comprehensive analysis of the psychological impact of COVID-19 on health workers and highlight the importance of targeted interventions and support systems to safeguard their well-being and maintain the quality of patient care. The questions were provided in hard copy to maintain the privacy of health worker and to maintain more transparency than that of a digital media surveying.

Questionnaire and its justification

Do you feel neglected by society being a health worker during the pandemic?

Justification: This question aims to assess the social impact of the pandemic on health workers, specifically focusing on feelings of neglect or recognition from society. Understanding the experiences and emotions of health workers in relation to societal attitudes during the pandemic can provide valuable insights into the support and appreciation they receive.

Do you think COVID-19 negatively affected the quality of your relationship with society?

Justification: This question further explores the social impact of the pandemic on health workers by investigating how their relationship with society may have changed. By assessing whether the pandemic has had negative effects on their interactions and connections with the community, the study can identify potential areas for improvement or support.

Did you avoid intimacy with partner/family because of the possibility of exposing them to a possible infection?

Justification: This question delves into the personal and emotional challenges faced by health workers during the pandemic. It assesses the impact of their work on their personal lives and relationships, highlighting the measures health workers take to protect their loved ones from potential exposure to the virus.

Has your income changed since COVID-19 restrictions?

Justification: This question focuses on the economic impact of the pandemic on health workers. It aims to understand whether their income has been affected by the pandemic-related restrictions and measures, which can provide valuable information on financial stress and potential needs for financial support.

Did wearing PPE kit cause embarrassment during the first wave of COVID-19?

Justification: This question explores the psychological impact of wearing personal protective equipment (PPE) during the initial wave of the pandemic. It seeks to understand if health workers experienced any feelings of embarrassment or discomfort related to wearing PPE, which can offer insights into the emotional challenges faced during this period.

Did you feel helpless when patients died due to COVID-19?

Justification: This question addresses the emotional toll of working with COVID-19 patients, specifically dealing with the loss of patients to the virus. It aims to understand the emotional well-being of health workers and how they coped with the challenges of witnessing patient deaths.

Will you recommend your loved ones to work in the healthcare sector?

Justification: This question assesses the perceptions of health workers about recommending healthcare professions to their loved ones. It provides insights into their experiences and perspectives on the profession, which can have implications for the recruitment and retention of healthcare workers.

Did increased shifts and workload make you frustrated with your colleagues in the healthcare facility?

Justification: This question addresses the impact of increased work demands on interpersonal dynamics within the healthcare facility. It aims to understand if the workload and stress of the pandemic had any adverse effects on working relationships among health workers.

Did you think that the face mask can adversely affect communications?

Justification: This question explores the practical challenges health workers faced while using face masks during the pandemic. It aims to understand if face masks posed any difficulties in communication, which can have implications for effective teamwork and patient care.

Do you feel inclined to move away from working in the healthcare sector due to the risk of the pandemic?

Justification: This question assesses the potential long-term impact of the pandemic on the retention of healthcare workers. It aims to understand if health workers have considered leaving the profession due to the risks and challenges posed by the pandemic.

Do you think COVID-19 has made healthcare workers more socially isolated?

Justification: This question addresses the social isolation experienced by health workers during the pandemic. It aims to understand if the demands of their work and the pandemic situation have led to increased isolation from their social circles.

Have you received enough family support during the COVID-19 pandemic?

Justification: This question assesses the support health workers have received from their families during the pandemic. Understanding the level of family support can provide insights into their overall well-being and coping mechanisms.

How often do you attend social gatherings and family functions after the pandemic?

Justification: This question explores health workers' post-pandemic social behaviours and interactions. It aims to understand if there have been any changes in their social participation and gatherings after the easing of restrictions.

Did you engage with society more often after being vaccinated against COVID-19?

Justification: This question assesses the impact of vaccination on health workers' engagement with society. It aims to understand if being vaccinated influenced their confidence in interacting with the community.

Do you avoid taking public transport to go to work due to the chance of getting infected?

Justification: This question addresses health workers' concerns about using public transportation during the pandemic. It aims to understand if fears of infection affected their commuting choices.

Did you face any violence from society during the COVID-19 pandemic in the healthcare institution?

Justification: This question explores the safety concerns of health workers during the pandemic. It aims to assess if any incidents of violence occurred in healthcare settings, providing insights into the need for improved security measures.

Each question in the survey focuses on specific aspects of the social impact of the COVID-19 pandemic on health workers. By analyzing and justifying these questions, the survey aims to gain a comprehensive understanding of the challenges and experiences faced by health workers in Kerala during this unprecedented time.

RESULTS AND DISCUSSION

The outbreak of COVID-19 has brought unprecedented challenges for healthcare workers, including nurses, who have been at the forefront of combating the pandemic. The following report presents the analysis of a survey conducted among 250 nurses across Kerala, India, to understand the social impact of the COVID-19 pandemic on health workers. The survey aimed to assess various aspects of the health workers' experiences, including feelings of neglect, changes in relationships with society, impact on personal life, and overall well-being during the pandemic.

Feeling Neglected by Society: Nearly half of the respondents (48.8%) expressed feeling neglected by society during the pandemic. This sense of neglect might stem from the challenges faced by health workers and the lack of adequate recognition for their efforts.

Quality of Relationship with Society: A significant portion (44.4%) believed that COVID-19 negatively affected their relationship with society. The pandemic's impact on healthcare workers might have influenced their interactions with the community and their perceptions of how they are perceived.

Avoidance of Intimacy with Family/Partner: A majority of respondents (72.4%) admitted to avoiding intimacy with their family or partner to reduce the risk of infection. This cautious approach reflects the burden healthcare workers faced in balancing their personal lives with the risks associated with their profession.

Income Changes due to COVID-19 Restrictions: A considerable proportion (68%) reported changes in their income due to COVID-19 restrictions. The pandemic's economic implications might have affected their financial stability and added to their stress.

Embarrassment from Wearing PPE during First Wave: During the first wave of COVID-19, more than half of the respondents (56.4%) experienced embarrassment when wearing PPE. This feeling could be attributed to the novelty of the situation and public perceptions of PPE usage.

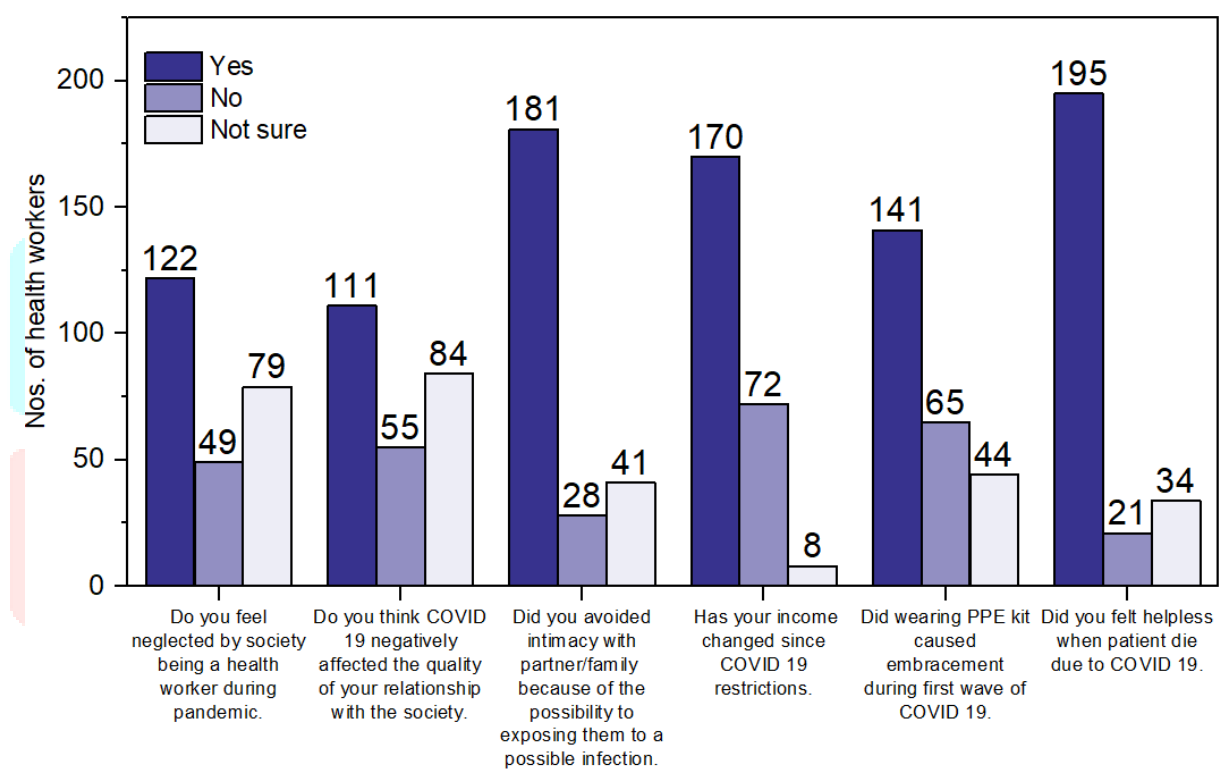


Figure 1. Responses of open ended questions by healthcare workers

Helplessness when Patients Die due to COVID-19: The pandemic's emotional toll was evident, with 78% of respondents expressing feeling helpless when patients died due to COVID-19. Witnessing the loss of lives may have taken a toll on their mental well-being.

Recommendation of Loved Ones to Work in Healthcare Sector: A majority (58.8%) would recommend their loved ones to work in the healthcare sector, indicating their commitment to their profession despite the challenges.

Frustration with Colleagues due to Increased Workload: The increased workload during the pandemic led to frustration among 76% of respondents. This could have implications for team dynamics and overall job satisfaction.

Perception of Face Mask Affecting Communications: A significant percentage (70.4%) believed that face masks can adversely affect communications. This perception highlights the practical challenges faced by healthcare workers in maintaining effective communication while adhering to safety protocols.

Consideration of Leaving the Healthcare Sector due to Pandemic Risk: Over half of the respondents (54%) contemplated leaving the healthcare sector due to the risk posed by the pandemic. This finding underscores the concerns about personal safety and job security among healthcare workers.

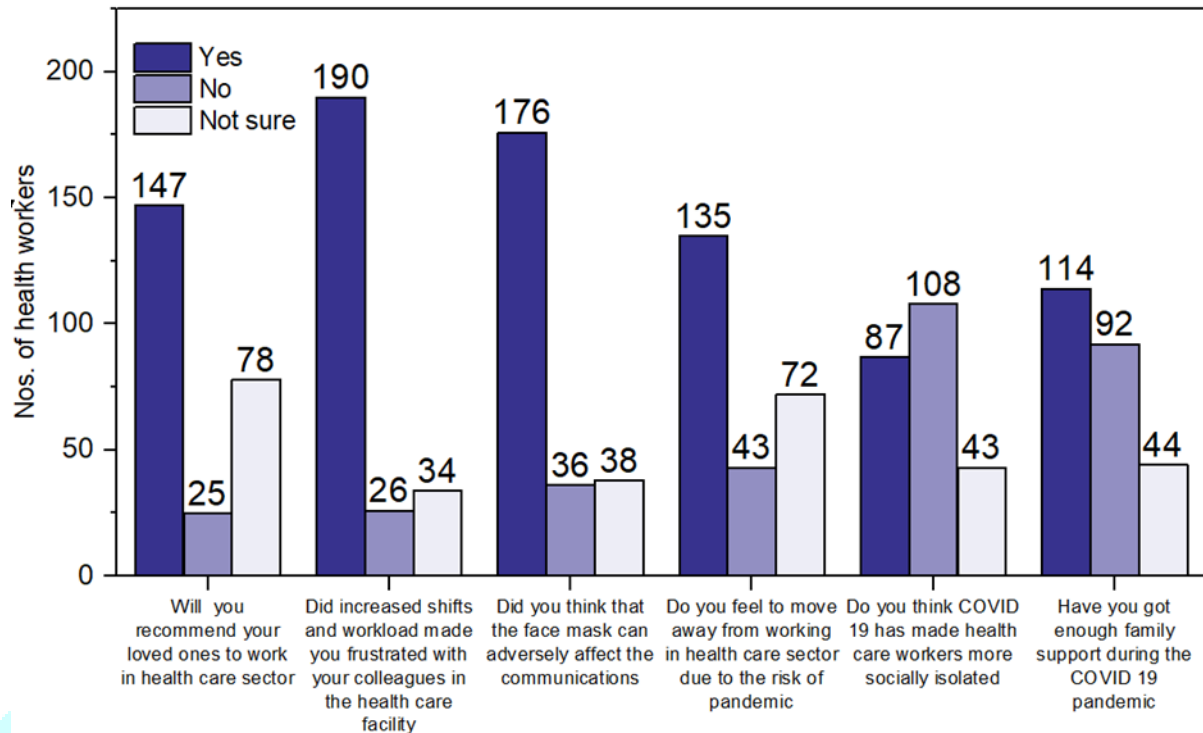


Figure 2. Responses of open ended questions by healthcare workers

Perception of Increased Social Isolation among Healthcare Workers: Some respondents (34.8%) believed that COVID-19 made healthcare workers more socially isolated. The pandemic's demands might have limited their opportunities for social interactions outside of work.

Family Support during the COVID-19 Pandemic: While 45.6% reported receiving enough family support during the pandemic, 36.8% felt they did not receive sufficient support. Adequate family support is crucial in helping healthcare workers cope with the challenges they face.

Frequency of Attending Social Gatherings and Family Functions after the Pandemic: The pandemic significantly reduced attendance at social gatherings and family functions, with only 39.6% attending all invited functions.

Engagement with Society after Vaccination against COVID-19: After getting vaccinated, 62.4% of respondents engaged more with society, indicating increased confidence in public interactions.

Avoidance of Public Transport due to Infection Risk: Many respondents (44%) avoided public transport to work, reflecting their vigilance in minimizing exposure to potential infections.

Experience of Violence from Society in Healthcare Institutions during COVID-19 Pandemic: A small percentage (7.6%) experienced violence from society in healthcare institutions during the pandemic, underscoring the need for enhanced safety measures for healthcare workers.

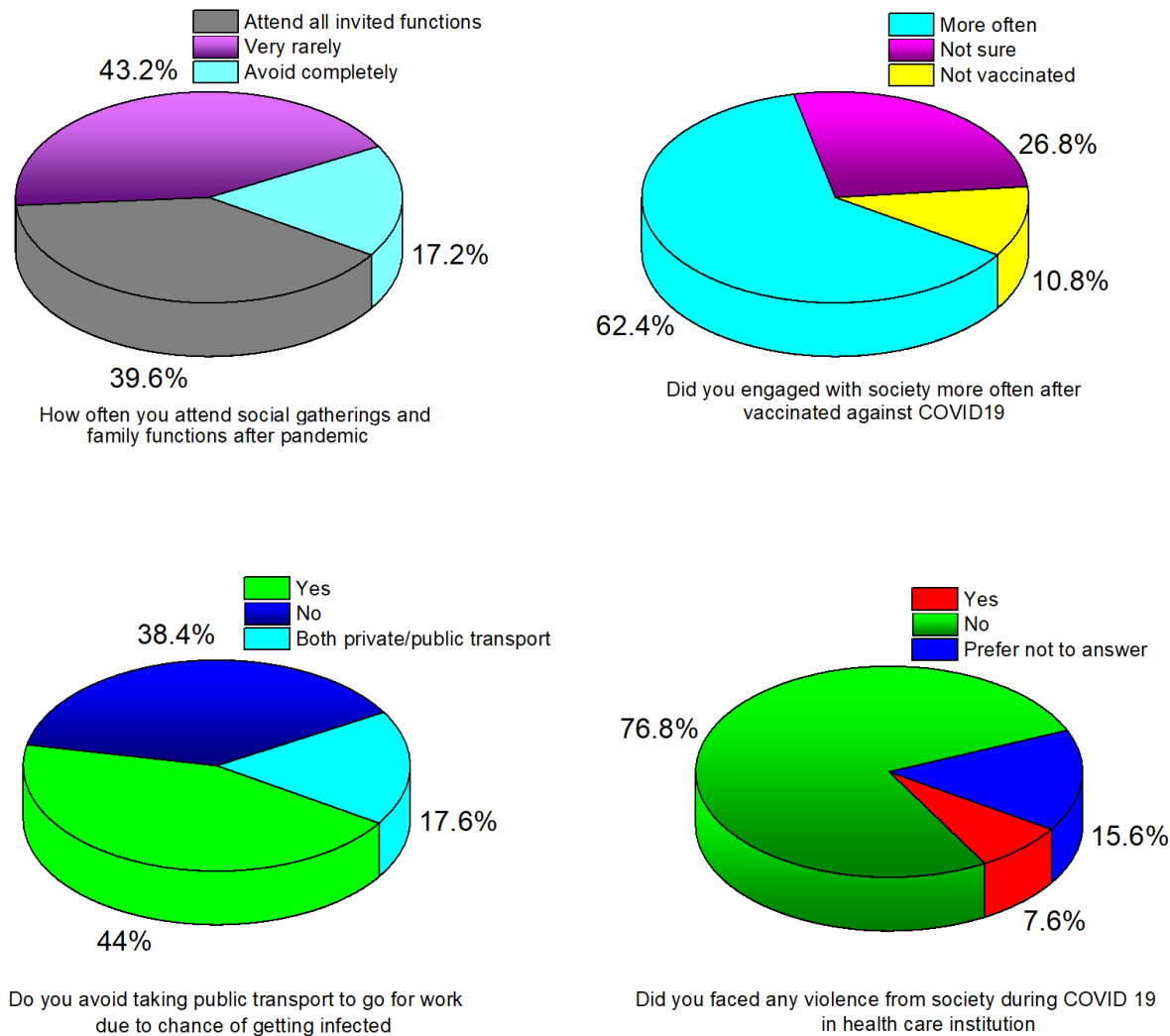


Figure 3 . Responses of detailed questions by healthcare workers

The social survey conducted to assess the psychological impact of COVID-19 on health workers in Kerala has yielded valuable insights with far-reaching implications. The results confirmed that a significant portion of health workers felt neglected by society during the pandemic, shedding light on the emotional struggles faced by these frontline professionals. The identification of psychological stressors, such as feelings of helplessness when patients died from COVID-19 and the challenges of avoiding intimacy with family members, underscores the need for targeted mental health support programs.

Additionally, the survey highlighted the importance of social support for health workers. While some respondents reported receiving enough family support during the pandemic, a notable percentage felt they lacked sufficient assistance. This emphasizes the necessity of strengthening social support systems to bolster the resilience of health workers and alleviate their emotional burden. The survey also uncovered workplace dynamics, with increased workloads leading to frustration among health workers. Addressing factors contributing to this frustration can foster a positive work environment, enhancing collaboration and communication among healthcare professionals.

Moreover, the survey brought attention to the issue of healthcare workers considering leaving the sector due to pandemic-related risks. Urgent measures to retain healthcare professionals, such as ensuring their safety through adequate PPE and vaccination drives, are essential in bolstering their confidence and commitment to their profession. Furthermore, the findings highlighted the occurrence of violence from society towards health workers in healthcare institutions during the pandemic, necessitating measures to ensure their safety and public awareness initiatives to foster respect and appreciation for frontline workers.

Overall, the comprehensive data collected through this survey empowers policymakers and healthcare authorities to make informed decisions to support the well-being of health workers. By recognizing their emotions, identifying stressors, and understanding their experiences, the survey lays the groundwork for compassionate interventions that prioritize the mental health and resilience of health workers, ultimately contributing to the provision of quality healthcare during these challenging times.

CONCLUSION

The comprehensive data collected through this survey empowers policymakers and healthcare authorities to make informed decisions regarding the well-being of health workers. The survey provides a strong evidence base for formulating policies and targeted interventions that address the unique challenges faced by healthcare professionals during and beyond the pandemic.

In conclusion, the social survey on the impact of COVID-19 on health workers in Kerala has far-reaching implications for the well-being and support of these frontline professionals. By recognizing their feelings, identifying stressors, and understanding their experiences, the survey lays the groundwork for comprehensive and empathetic interventions to enhance the resilience and mental health of health workers, ultimately contributing to the provision of quality healthcare during these challenging times.

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