

Assessment of Work-Related Psychosocial Factors Among Primary Healthcare Employees

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ABSTRACT

Background: Employees in the healthcare field repeatedly face psychosocial risks at work that could impact their well-being and physical and mental health. Primary healthcare settings require complex cognitive demands and continuous patient interaction. This study aims to investigate work-related psychosocial factors among healthcare employees in primary healthcare centers in Saudi Arabia and determine common stressors.

Method: A cross-sectional study was performed in primary healthcare (PHC) from February to June 2024. A total of 80 healthcare employees were invited to participate. Of these, 52 completed the questionnaire, yielding a response rate of 65%. All analyses were conducted based on the completed responses ($N = 52$). The survey was an anonymous online questionnaire including sociodemographic questions, as well as selected subscales from the Copenhagen Psychosocial Questionnaire II (COPSOQ II). Descriptive statistics were performed to assess the responses, and Cronbach's alpha reliability statistics were performed on the subscales. Ethical approval was granted through the Royal Commission Health Services Program IRB in Jubail.

Results: Cognitive demands (2.84 ± 0.51) were the highest-rated job demand, indicating a high level of mental workload. On the other hand, the meaning of work (2.87 ± 0.39) and support from co-workers (2.86 ± 0.27) were both very high, indicating strong intrinsic motivation and a supportive peer environment. The quantitative demands were moderate (1.95 ± 0.54), indicating that overall workload levels were manageable. The ratings for organizational factors like supervisor support and recognition were moderate, suggesting areas for organizational improvement. All the scales were very reliable (Cronbach's $\alpha = 0.81$ - 0.88).

Conclusion: The results show that the work environment is very complicated, with high cognitive demands and strong social and motivational resources. Improving organizational support and distributing the workloads may contribute to improving working conditions in primary healthcare settings.

Keywords: Psychosocial risks, Stressors, Healthcare employees

INTRODUCTION

The International Labor Organization (ILO) and the World Health Organization (WHO) worked together in 1984 to define psychosocial factors in the workplace as “situations that exist in the workplace that are directly associated with the organization of work and its social context, encompassing

the nature of work and duties completion, which possess the potential to influence the progression of work and the health (physical, psychological, or social) of the worker” (Pejtersen et al., 2010; Eurofound, 2025). Exposure to detrimental psychosocial risk factors can lead to anxiety and disease, which, if persistent, may increase absenteeism, workplace conflicts, employee turnover, and psychosomatic disorders (Rotenstein et al., 2018). Psychosocial issues, unlike other workplace dangers, can provide advantageous results when individuals are afforded opportunities to augment their skills and competencies. Therefore, enhancing psychosocial aspects rather than eliminating them is crucial for augmenting employee well-being and organizational success (Schneider & Weigl, 2018). Psychosocial factors can change how motivated, satisfied with their jobs, and stressed-out employees are, depending on how they see them and how effectively they can deal with them (Rotenstein et al., 2018). They encompass both the actual work environment and how employees feel about their jobs.

Healthcare occupational psychiatric morbidity rates are higher for healthcare employees than for workers in other fields, which means that healthcare employees are more likely to have mental health problems at work (Schneider & Weigl, 2018). Workplaces are exposed to many psychosocial risks, like having a high workload, being overly stressed, not knowing what kind of work they do, having little control over their environment, and not getting enough social support from coworkers or staff. Each of these aspects can negatively impact employee health, performance, and productivity through stressors (Pejtersen et al., 2010; Ilić et al., 2017).

The organization of work, how work is organized and managed, and the social and occupational context in which work occurs can create psychosocial risks for the employee through the pathway of stress (Eurofound, 2025). Psychosocial risks can arise in many ways, including, but not limited to, the content of work (e.g., conflicting demands, insufficient training and/or development, and limited autonomy); the way in which work is organized and managed (e.g., high workloads, limited participation in decision-making, poor communication, and poor work/life balance); and the social aspects of work (e.g., lack of support, bullying, violence at work, and job insecurity) (Chagas, 2015; Freimann & Merisalu, 2015; Nuebling et al., 2013). Psychosocial stressors can be especially significant in primary care services, where a wide variety of services are offered, from the initial visit to long-term care and related preventive health.

Although PHCs play a significant part in health systems, little is known about the psychological aspect of working at a PHC, and most of the research done to date pertains mostly to the employees of healthcare systems. As well, psychosocial factors have been recognized worldwide as being important factors influencing occupational health. Therefore, examining psychosocial factors in healthcare organizations is vital in developing targeted interventions aimed at improving employee satisfaction and improving the effectiveness of the organization (Freimann & Merisalu, 2015; Nuebling et al., 2013). Although there are current gaps in knowledge regarding the psychosocial factors influencing healthcare staff working within primary care in Saudi Arabia, an understanding of these factors will enable the development of

effective interventions to assist staff, build resilience in organizations, and enhance the quality of care provided in primary care settings. This study aims to investigate work-related psychosocial factors of healthcare employees among primary healthcare centers in the Kingdom of Saudi Arabia and determine common stressors. The results are expected to improve comprehension of the psychosocial difficulties faced by healthcare employees and inform the development of interventions and policies designed to enhance their well-being and optimize healthcare delivery.

METHODOLOGY

An observational A cross-sectional study was conducted in Saudi Arabia in the period from February to June 2024. A total of 80 healthcare employees were invited to participate in the study, and 52 completed the questionnaire, including physicians and nurses currently employed at the designated healthcare centers, who participated in the research throughout the study duration. The group that met the inclusion criteria had to be involved in direct patient care, have the ability to complete the survey, and give informed consent to participate.

The inclusion criteria were restricted to physicians and nurses employed in primary healthcare centers during the study period who were directly engaged in patient care and consented to participate in the study. The exclusion criteria included those without direct patient care responsibilities, on long-term administrative leave (for example, maternity leave or parental leave), or who failed to complete their survey accurately or completely. This was done in order to focus on clinical professionals that directly provided care and could, therefore, be impacted most significantly by psychosocial stressors at work.

Ethical approval for the investigation has been obtained from the Institutional Review Board committee of the Royal Commission Health Service Program (RCHSP) to conduct the dissertation and survey among healthcare employees at the family medicine centers. The authors used an online anonymous questionnaire to collect data. It had two parts: the first one assesses sociodemographic characteristics encompassing age, gender, profession, years of experience, and employment status. The second part of the questionnaire included the English version of the Copenhagen Psychosocial Questionnaire (COPSOQ II).

COPSOQ II is a validated measure that was created to identify factors in the work environment that are associated with health promotion, burnout, and overall psychosocial well-being (Pejtersen et al., 2010). Developed by Kristensen and Borg, COPSOQ II has been widely used in research related to occupational health (Kristensen et al., 2005) and has been included in numerous studies in healthcare settings. The COPSOQ II scales on “quantitative demands,” “cognitive demands,” “possibilities for development,” “meaning of work,” “recognition,” and “social support from supervisors and coworkers” were used in this study. All the variables had four corresponding validated items, except for meaning of work, recognition, and social support from supervisors and co-workers (three different validated

item numbers for these three variables). Responses were measured using a 5-point Likert scale and transformed into standardized scores ranging from 0 to 100 according to COPSOQ II guidelines (0 = lowest, 100 = highest level of the construct). For interpretability in this study, mean values were reported on the original Likert scale (1-5), where higher scores indicate higher exposure to the respective psychosocial factor. Negatively worded items were reverse coded prior to analysis. COPSOQ II has been determined to be a reliable tool for measuring the psychosocial functioning of employees in healthcare environments and has met or exceeded all psychometric property expectations as a tool for measuring psychosocial risks in the workplace. The internal consistency of the COPSOQ II subscales was acceptable to excellent, with Cronbach's alpha coefficients ranging from 0.81 to 0.88, indicating strong reliability of the measurement instrument.

People who took part in this study did so on their own voluntary basis, and there were no risks or adverse effects for those who chose not to or dropped out at any time. Before the study started, every healthcare employee who took part was given a detailed outline of the study's goals and topics. This made sure that the study was open and followed standards.

This study used the Statistical Package for the Social Sciences (IBM SPSS version 26) for the analysis of the statistical data. The quantitative data analysis incorporated descriptive statistics pertaining to health and demographic categories. Also, the study used the right descriptive statistics to analyze and present the continuous data. The means and standard deviations (mean \pm SD) of normally distributed continuous variables were used to show central tendency and variability. The study used the t-test and ANOVA to see how demographic factors affected people's perceptions of differences. A *p*-value < 0.05 was thought to be statistically important. Percentages and frequencies were used for categorical and qualitative variables to make sense of the socio-demographic and working condition data. For continuous variables, the study used the mean and standard deviation (SD).

RESULTS

A total of 80 healthcare employees were invited to participate, and 52 completed the survey, yielding a response rate of 65%. The COPSOQ II was employed to assess psychosocial factors, and descriptive statistics, encompassing mean and standard deviation, were calculated.

The sample was made up of 55% female and 45% male. Most of the people who answered (44.7%) were between the ages of 35 and 50. Most of them (78.7%) were married, and most of them (52.7%) had a bachelor's degree. 44.5% of the people who took part were physicians, and 25.0% were nurses. 42% of the people had worked in the field for 11 to 20 years, and 54% of them did not have any additional administrative obligations. No statistically significant differences were observed in psychosocial factor scores across sociodemographic and occupational groups, such as gender, age, marital status, education, specialization, years of experience, daily patient load, or

administrative responsibilities. The mean scores and standard deviations of the COPSOQ II psychosocial subscales are presented in Table 1.

Table 1: Mean, standard deviation, and reliability of psychosocial factors (COPSOQ II) among healthcare employees (N = 52).

Subscale	Mean	SD	Cronbach's α	Interpretation
Quantitative Demands	1.95	0.54	0.81	Moderate workload pressure
Cognitive Demands	2.84	0.51	0.83	High mental and attentional demands
Possibilities for Development	2.38	0.29	0.85	Moderate skill uses and learning opportunities
Meaning of Work	2.87	0.39	0.88	High sense of work meaning
Rewards	2.36	0.37	0.86	Moderate recognition and fairness
Support from Colleagues	2.86	0.27	0.84	Strong peer support
Support from Supervisors	2.66	0.11	0.87	Moderate supervisory support

There were several important patterns that resulted from the study of the psychological side. The cognitive demands emerged as the most significant stressor and got the mean score (2.84 ± 0.51), indicating high mental and attentional demands associated with clinical tasks, especially when it comes to doing more than one thing at a time and remembering what they need to do. In contrast, quantitative demands were assessed as moderate ($M = 1.95 \pm 0.54$), indicating that workload pressures existed but were not persistently excessive.

On the protective side, the meaning of work obtained the highest mean score (2.87 ± 0.39), indicating strong intrinsic motivation and a high perceived sense of work meaningfulness. Similarly, colleague support was rated highly (mean = 2.86 ± 0.27), which is an excellent approach to coping with stress, which shows that peer support is a good way to deal with stress. Healthcare employees demonstrate greater resilience when given opportunities for professional development and skill utilization, and this, in turn, acts as a protective factor against psychosocial hazards such as high job demands, lack of autonomy, and role confusion. These factors contribute to improved psychosocial well-being and workplace functioning, increased job satisfaction, and organizational engagement. The average scores for supervisory help (mean = 2.66 ± 0.11) and rewards (mean = 2.36 ± 0.37) were rated at moderate levels. This indicates that these factors indicate potential areas for improvement with recognition, justice, and support from management, even if they do help in some ways. The internal consistency of the COPSOQ II subscales was acceptable to excellent, as shown in Table 1 (Cronbach's $\alpha = 0.81$ - 0.88).

Although the present analysis is primarily descriptive, the observed patterns suggest interactions between key psychosocial factors, particularly between job demands (e.g., cognitive demands) and job resources (e.g., social support and meaning of work), reflecting the multidimensional nature of the psychosocial work environment.

DISCUSSION

This study used specific subscales of the Copenhagen Psychosocial Questionnaire II (COPSOQ II) to evaluate work-related psychosocial factors among healthcare employees in primary healthcare (PHC) centers in Saudi Arabia. The findings provide significant insights into the protective factors and stressors that affect psychosocial risk and define the workplace environment.

Cognitive demands received the highest rating ($M = 2.84 \pm 0.51$) among the most significant stressors identified, indicating that healthcare employees encounter substantial cognitive and attentional challenges, including multitasking, sustaining concentration, and recalling complex clinical responsibilities. The previous studies support these findings that have identified cognitive overloading as an important psychosocial risk factor in health care; these factors can cause fatigue, poor job performance, and decreased productivity (Pejtersen et al., 2010; Freimann & Merisalu, 2015). The rating given by all participants for quantitative demands was moderate ($M = 1.95 \pm 0.54$). This indicates that participants did not perceive the total workload to be excessive or overwhelming. Nevertheless, complaints about the unfair distribution of tasks suggest that the total amount of time worked is not the only factor affecting stress levels. The other contributor appears to be the way in which resources & responsibilities have been distributed. Similar findings in other healthcare systems suggest that inequitable task division may amplify psychosocial stress beyond the intensity of the workload itself (Ilić et al., 2017).

The results of the study identified several protective factors in addition to the environmental stressors referenced previously. Meaningful work received the highest rating among all the protective factors ($M = 2.87 \pm 0.39$), indicating an extremely strong intrinsic motivation and an overall sense of professional purpose. Previous research has supported these findings, indicating that the more meaningful a worker perceives their work, the more resilient they will be, the greater their job satisfaction will be, and the lower their level of work-related stress will be (Chagas, 2015; Nuebling et al., 2013). The support of coworkers has been indicated as another protective factor ($M = 2.86 \pm 0.27$), which shows how working with your fellow coworkers and other professionals can support you in reducing your stress and resolving problems. The findings of this study support previous research indicating that social support can be a key protective factor for healthcare employees against psychosocial risks and promote the mental health of healthcare employees (Freimann & Merisalu, 2015). Along with meaningful work and support from coworkers, chances for continuing professional development were also seen as ways to protect resilience. Therefore, developing professional skills and gaining knowledge through training allows employees to improve how they cope with and respond to the demands and challenges of the workplace, including problems resulting from psychological stressors.

Organizational support frameworks for all employees exist, meaning, for example, the amount of recognition, equity, and the level of engagement by management remains low. Studies have consistently shown that if employees receive little or no organizational support, it leads to low job satisfaction and

an increased likelihood of leaving the organization (Nuebling et al., 2013). Therefore, it is important for leaders, as part of creating supportive work environments for employees, to improve their engagement with them, provide fair reward structures, and acknowledge their work efforts. Without ongoing and explicit support from management, healthcare organizations will have difficulty enhancing the overall health and retention of their employees.

This comparison with international evidence demonstrates both similarities and differences across the globe. The increased cognitive burden aligns with international studies showing that healthcare workers will experience larger amounts of cognitive demands and a need to multitask (Pejtersen et al., 2010; La Torre et al., 2020). Research from Nordic countries supports the caretaking aspect of connecting with meaningful work and receiving support from co-workers, highlighting that professional meaning and social support are essential preventive measures for psychosocial strain and occupational stress (Nuebling et al., 2013). These findings demonstrate that there is a relationship between the work environment and level of socio-organizational support; while there are some common psychosocial risk factors, health policies and the cultural conditions of the organization can have a large influence on which psychosocial risks will be present.

The sociodemographic characteristics of healthcare employees are not correlated with their level of psychosocial risk factors. This study suggests that the same sources of stress affect a wide variety of them and that the greatest influence on the psychosocial health of them comes from the way in which the organization is structured and operated, rather than the sociodemographic characteristics of individual healthcare workers. European research (Freimann & Merisalu, 2015) has shown similar results and a much stronger link between psychosocial well-being and the workplace than between sociodemographic factors.

The findings show that working in healthcare is demanding, alongside its strong intrinsic motivation, social support from co-workers, and access to professional development opportunities, all of which help reduce stress. But cognitive demand is still a concern for healthcare employees, so organizational support needs to keep getting better. Improving the working environment and enabling them to become more resilient will be aided through enhancement of recognition, equitable distribution of work responsibilities, and improved supervisor support.

The findings of this study emphasize how important it is to balance strong intrinsic motivation and peer support with increased cognitive demands and decreased attention demands. It suggests that having meaningful work and strong support from co-workers is also a way to alleviate some of the stress associated with the responsibility of working in primary care; on the other hand, there are areas that have received mediocre ratings (e.g., compensation, supervisor support, and commitment).

While the current study focuses on descriptive analysis of psychosocial factors, future research should incorporate correlation and regression analyses to further examine the relationships and predictive effects among job demands and resources. At the same time, recognizing constraints that existed is also necessary. The key limitation of this study is that data

collection is limited to a single department, which greatly impacts the results' generalizability to all healthcare workers of Saudi Arabia, as well as healthcare workers from any other country. As far as causal inferences are concerned, the cross-sectional design of this research will limit the ability to draw causal conclusions, and reliance on self-reported measures may lead to the introduction of bias, including the possibility of downplaying negative experiences or providing responses that are considered socially acceptable.

The study provides practical recommendations to improve practices associated with the psychosocial workplace environment. Ensuring equitable workloads and adequately staffed workplaces are critical factors influencing excessive demands. Furthermore, appropriate supervisory practices, peer collaboration, and supportive recognition systems to enhance the level of organizational commitment also reflect similar interacting demands.

CONCLUSION

This study utilized COPSOQ II to investigate psychosocial factors among healthcare employees in Saudi Arabia's primary healthcare centers. The results indicated that cognitive demands constituted the primary stressor, whereas work meaning, peer support, and opportunities for professional development served as protective factors. Sociodemographic factors exhibited no significant correlation with psychosocial risks, suggesting that stressors are systemic rather than individual.

Specific organizational interventions are necessary to enhance resilience, promote well-being, and ensure workforce well-being. Therefore, future research must be conducted to assess influencing elements and establish causal frameworks and create feasible action plans that enable the reduction of the effects on the health of employees in healthcare service.

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