

Perceived Job Demands: A Qualitative Study of Stress in Healthcare Workers after Organizational Changes

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Abstract

Background

Health care workers (HCWs) are at risk for occupational stress. The negative effects of stress HCWs subsequently affect the quality of their job performance. Since 2014, there have been extensive changes in the primary health care system in Iran. Because evidence has shown that organizational change can cause stress in employees, this study was designed and conducted to explore the perceived job demands by HCWs in primary care centers after extensive organizational change.

Method

A qualitative study was designed with a content analysis approach. Study data were collected through 11 semi-structured individual interviews and a focus group with HCWs.

Results

Participants reported high stress at work. They reported various factors as stressful job demands. These factors included: organization's supervisory function (Weakness of the monitoring process, Unfair policies, Apply regulatory pressure), Role features (Role load, Role conflicts, Role ambiguity, Workload) High workload, Not having time, Great variety of tasks), job insecurity (Lack of job security due to employment status, Concerns about payments, Lack of physical security, Uncertain job future), Working with clients (Different characteristics of clients, Harassment of clients to achieve their expectations, Tensions in client relationships, Lack of knowledge of clients about health care work instructions), Perceived job content (Annoying work with different units of the organization, Monotonous and repetitive tasks, Meaningless tasks, No attractive and no excitement).

Conclusion

Currently, HCWs working in health centers are faced with various stressful situations. Most of the factors identified in this study overlap in increasing stress. The impact of workload and organizational oversight on occupational stress seems to be more pronounced. Given the important role of HCWs in promoting health, the design and implementation of effective interventions by policymakers to control stress in HCWs is essential.

Background

Today, Pressure in the workplace is an inevitable and common phenomenon. When that pressure becomes excessive or uncontrollable, it leads to stress in employees [1]. Work-related stress is “an adverse reaction that employees may experience when faced with job demands and pressures that challenge their knowledge and skills as well as their ability to cope [2].” According to Everest College survey, 83% of American workers suffer from stress [3]. Surveys show, work related stress in 80% of EU organizations is worrying [4]. In recent years, early retirement and absenteeism have increased due to

psychological problems. About 39% of all occupational diseases are attributed to work-related stress, depression or anxiety [4]. A study has shown that in 2019, nearly two-thirds of the workers are on the edge of quitting their jobs due to workplace stress [3]

Studies have shown that absenteeism rates for workers with poor mental health are approximately five percent higher than for other workers [5]. Stress increases physical diseases including cardiovascular diseases, musculoskeletal disorders [6]. In addition, it has been found that occupational stress leads to anxiety, depression, burnout, decreased job satisfaction, increased absenteeism [7] The highest financial costs of employee mental illness are related to reduced productivity [5].

One of the tasks of health systems is to provide primary health care (PHC), such as health education, disease prevention, and family health care. Therefore, HCWs play a vital role in promoting community health. They experience high levels of workplace stress and may even be higher than other occupational groups [8- 11]. Healthcare workers are often exposed to stress at their workplace due to increased workload, high demand, lack of skills, and organizational problems. This can lead to anxiety, burnout and mental health problems [12]. Research has shown that occupational stress is one of the most important factors in reducing job performance of employees [13]. As it turns out, when employees are satisfied with their job and feel more supportive of the organization, patients have a better care experience [14]. Evidence has shown that occupational stress are more likely to cause job burnout [15]. When HCWs suffer from burnout, their job performance deteriorates. On the other hand, their job satisfaction is likely to decrease and their tendency to quit increases [16]. This evidence clearly demonstrates the importance of paying attention to stress and mental health in the workplace. Identifying sources of stress is essential to controlling and preventing increased stress in the workplace.

Many researchers have studied occupational stress [17- 21], but in recent decades, due to changes in the nature of organizations , more research is needed. In addition, structural changes in the health system expose employees to stressful challenges and conditions, and ultimately lead to burnout [22]. In Iran, structural changes in the primary health care system occurred in 2014. These changes included both the development of previous tasks and the addition of new tasks for caregivers.

In order to have a clearer and deeper understanding of stressors, especially after new organizational changes, qualitative studies based on the perceptions and experiences of healthcare workers are needed, while existing studies related to occupational stress have mostly had a quantitative approach [23- 25]. On the other hand, in Iran, most studies have focused on nurses and physicians (field of treatment) and very few studies have been conducted on healthcare workers (field of PHC) [26- 28]. Therefore, it is important to have a clear understanding of the health care providers' view of job demand in primary health care centers.

Theoretical framework

The Job Demand Resources (JD-R) model is a popular theoretical framework to investigate the reciprocal relationships between job characteristics and employee well-being [29]. This model is based on the

balance between demands and resources [30, 31]. According to the JD_R model, job demands are associated with unfavorable and highly stressful conditions, and resources are related to conditions that are motivating if sufficient [30]. In other words, excessive job demand with insufficient resources leads to stress [6]. Job demands refers to the physical, social, or organizational aspects of a job that can cause stress or health problems [32]. Research has shown that there is a positive relationship between perceived stress and job demand [33].

Study aims and research questions

The aim of this study was to discover the perceived job demands by HCWs' in primary health care centers after the changes in the Iranian health system. To achieve the objective of the study, the following research question was presented:

What job characteristics cause stress in health care providers?

What organizational factors lead to stress in health care providers?

Materials And Methods

Study design

Participants in this study included 21 health care workers working in 18 health centers in the geographical location of Alborz and Qazvin cities, which are affiliated with Qazvin University of Medical Sciences in Iran. A qualitative approach was chosen because there was little information about the research topic and the new conditions of the target group. On the other hand, qualitative research was selected to achieve a deeper, more accurate and comprehensive understanding of the views and perceptions of the target group on the subject of the study [34]. This study was conducted as a basis for designing a workplace health promotion program.

Recruitment of participants

Participants were recruited from different health centers. In order to obtain comprehensive information from HCWs views and experiences, multi-stage sampling including purposive and snowball sampling was used. Combining sampling methods at different stages of the research helps researchers to confidence a reduction in study bias and involvement of different participants [35] The inclusion criterion for participants was having a minimum of six month experience as HCW. After inviting qualified HCWs, appointments were made for employees interested in participating at a date and place of their choice. All participants signed the consent form before collecting the data.

Data collection

The data for this study was collected through semi-structured interviews and focus group interview with the participants. The interviews were conducted between April 2019 and June 2020. All participants

wanted to be interviewed at their workplace. A semi-structured interview guideline about workplace was developed. The semi-structured interview and group discussion questions included two main questions:

- Describe an experience of a stressful situation at work?
- What causes your stress and anxiety at work?

The first author (she was PhD candidate) conducted all the interviews. All interviews were carried out face-to-face and during work time. Interviews were conducted in Persian and they were audiotaped. The duration of the interview was between 30 and 90 minutes and focus group was 60 minutes. Once new information was obtained from the interviews, it was included in subsequent interviews to gain a deeper understanding of the data [36]. Finally, the interviews were conducted until the theoretical saturation was reached. According to this criterion, data collection stops when the final interviews do not show any new information and are merely a repetition of previous information [37- 39].

Data analysis

All interviews were audiotaped and transcribed verbatim on the same day. Data analysis was performed using qualitative content analysis approach described by Granheim and Lundman method [40].

The whole interview was considered as an analysis unit. Each interview was read several times by the researcher. After identifying the stressors, the meaning units were identified. In fact, a meaning unit can be words, sentences, and paragraphs that contain related content. By the analysis progressed, the meaning units were compacted and condensed based on the content, then the condensed meaning units were abstracted, and coded with a label. At this stage, we tried to avoid considering the theoretical model (JD-R) as not to affect the data. The codes were placed sub categories and categories based on differences and similarities. Finally, they were named in the JD-R model using different aspects of the job demand component.

The first author was deeply involved with the data for more than a year. Meetings were also held during the coding process and the codes were repeatedly discussed and revised by the authors to reach an agreement. In addition, the data were reviewed by a qualitative studies specialist who was independent of the team. To ensure the researcher's correct interpretation of the participants' opinions, after summarizing each interview and presenting it to the participant, she was asked to verify. MAXQDA (10) software was used to organize the data.

Conclusions

In total, 21 healthcare workers (female=21) with mean 34.4 years old participated in this study. 13 were married and 8 single. The employment status characteristics of participants are included in [table 1](#).

n	Table1: Employment status
7	Official (permanent employment)
6	Company contract (non-permanent employment)
2	Family doctor contract (non-permanent employment)
6	Service Commitment Period (non-permanent employment)
16	Responsible health care worker (More than one role)

Analyzes of interviews and group discussions identified 6 categories and subcategories related to job demands (Table 2).

subcategories	categories	
Weakness of the monitoring process Unfair policies Apply regulatory pressure	organization's supervisory function	
Role load Role conflicts Role ambiguity	Role features	Job demands
High workload Not having time Great variety of tasks	Workload	
Lack of job security due to employment status Concerns about payments Lack of physical security Uncertain job future	job insecurity	
Different characteristics of clients Harassment of clients to achieve their expectations Tensions in client relationships Lack of knowledge of clients about health care work instructions	Working with clients	
Annoying work with different units of the organization Monotonous and repetitive tasks Meaningless tasks No attractive and no excitement	Perceived job content	

Organization'S Supervisory Function

Participants stated that the organization's supervisory function is an important source of anxiety and stress for HCWs in primary health care centers. Regulatory pressures such as outsourcing, forcing the HCWs to perform the tasks of others, and pressuring to meet the organization's expectations are among the stressors that harass participants. HCWs claim that superiors sometimes use the tactic of threatening

to fire, relocate, and deduct certain payments. Participants' experience showed that Superiors' threats lead to severe stress, followed by decreased focus and reduced quality of performance.

"Newly sent letters to the corona that must be received by a certain date, otherwise overtime will be cut, bonuses will be cut or leave will be canceled, they are all a threat. Instead of calmly following the letters and answering them, I am constantly stressed." [P18, responsible health care worker, focus group]

Participants mentioned the organization's unfair policies such as; Discrimination in payments, discrimination in the assignment of duties, disregard for the quality of performance for judgments and payments, lead to their emotional resentment.

"Why is my right of responsibility (one of the payments) being eaten, why should I not take my right of responsibility! Why are you taking the work from me but you do not give me my right" [P11, responsible health care worker, interview]

HCWs considered the monitoring process as a source of stress in the workplace due to the use of inappropriate monitoring methods, unfair judgment of the monitor, poor monitoring skills of the monitor. However, some HCWs considered monitoring to be necessary and useful.

"Some monitors just want to catch our red-handed when monitoring, this creates a lot of false stress." [P14, responsible health care worker, focus group]

Role features

One of the most important factors affecting occupational stress is the characteristics of the role in the organization [1]. All responsible HCWs believed that they were often under stress due to their responsible role and accountability. They stated that performing service and administrative duties at the same time as a person in charge causes them stress and anxiety.

"All the monitoring units expect you to perform as a supervisor ... but when you provide services like the rest of your colleagues, it's very, very difficult". [P8, responsible health care worker, interview]

On the other hand, being accountable to the organization for the poor performance and participation of other HCWs is painful for the responsible health care worker.

"A colleague says: I do not do that, why do you insist, whoever comes I will answer, but in the end no one walks up to them and says: You are a supervisor, we know you." [P14, responsible health care worker, focus group]

In this study, the importance of transparency in job goals, familiarity with evaluation criteria and knowledge of job descriptions were pointed out. Understanding the contradictions of the workplace puts stress on HCWs. These contradictions include the incompatibility of work with the ability of the employee, the conflict between the demands of the organization and the clients, the conflict between the

expectations of the organization and the conflict of health care beliefs with the expectations of the organization.

"We are doing something for the clients, they have different expectations from us, and sometimes it happens that a person comes up with the same issue and gets on my nerves until the end of the day." [P7, responsible health care worker, interview]

Workload

Increasing the workload was mentioned as the most important problem of HCWs after the changes in the health service system. Participants claimed that the increase in the variety of activities has led to a diversification of work tasks and an increase in workload, and ultimately it has become very difficult for them to manage tasks. On the other hand, overwork has led to a lack of time and reduced focus and quality of performance.

"When I first got a job, we only had a family planning job, we had vaccinations and pregnant mothers, but now things have changed completely; "Expectations have increased, the infectious and non-communicable diseases program has become more active, nutrition and mental health, referrals and everything ... In fact, the workload has changed a lot, it has increased and its diversity has increased." [P11, responsible health care worker, interview]

Working with clients

One source of workplace stress for HCWs is working with clients. Due to the wide range of care services, clients from different social groups and classes have different demands and expectations, and this poses challenges for HCWs and makes it difficult to work.

"Sometimes we deal with clients who do not understand anything, have a very low level of health literacy, do not understand everything we explain." [P1, interview]

One of the annoying experiences of HCWs in health centers was dealing with inappropriate behaviors and even obscenity and violence of some clients.

"I was measuring the baby's height and weight, nothing special happened, then the baby's father said a bad sentence that I was very upset, it was very useless at all, have a lump in one's throat so much that I wanted to cry, I was very upset. He should not have said anything to me." [P7, responsible health care worker, interview]

Clients sometimes have unreasonable or excessive expectations that push HCWs to achieve. However, participants claimed that sometimes clients 'unreasonable expectations were due to a lack of knowledge of HCWs' work instructions.

"The explanation you give him is not acceptable because he wants his request to be fulfilled and it does not matter to him what the consequences of doing that request are for the employee." [P3, interview]

Job insecurity

HCWs who were hired on a non-permanent basis reported that they were constantly concerned about keeping their jobs and were concerned about contract termination due to job performance or changes in the organization's human resources policies.

"Because my employment is a company contract, I have the stress of saying at once that we do not need you. I am always worried about what they say, I am not comfortable about my work." [P7, interview]"

A number of other HCWs who were on a short-term commitment period expressed concern about the uncertain future of employment and unemployment after the end of the commitment period, citing this as the most important cause of their stress.

"Now that after these two years of commitment, I really do not know what to do, is it really good to continue my education?" Is there a job to do at all? Or not? I do not know at all whether there is absorption in our field or not? "It's very worrying, you do not know what is going to happen tomorrow with the field of study you have." [P8, interview]

One of the occupational concerns of HCWs with non-permanent contracts was the non-timely payment of monthly salaries. On the other hand, due to the difference in the type of employment (contract), there was a difference in payments such as overtime and some bonuses that were not paid to HCWs with non-permanent employment contract. Finally, in addition to understanding the feeling of discrimination, HCWs are also concerned about income and financial problems.

"We have contract employment here, we have formal employment, everyone gets some kind of salary, while we all do the same thing, Even if the number of my services is a thousand, I get the same salary, but my colleague, even if his services are less, in addition to his salary, he also receives overtime work and bonuses, and even receives money for clothes. This is inequality." [P9, interview]

Perceived job content

Evidence suggests that job content is related to workplace stress [1]. Although one of the HCWs reported job diversity as lovely, but most of the participants in this study believed that working with different units of the organization is annoying due to the great variety of tasks and increasing workload and high responsiveness.

"The main problem of our job is that it is branch by branch and we are in contact with many superiors." [P13, focus group]

Two participants believed that some of their work activities were useless and meaningless. A number of HCWs believed that their jobs were unattractive and dull. They considered their job monotonous and without excitement.

“It's a very boring job and they are repetitive tasks, there is no excitement in it at all, there is only a series of repetitive tasks being done in a row.” [P1, interview]

Discussion

This study aims to explore the perceived job demands of HCWs after extensive changes in the primary health care service system in Iran, and of course a number of interviews and group discussions related to the timing of the COVID_19 epidemic.

As emphasized by the study participants, the organization's performance in judging, monitoring, and exerting pressure exacerbates potential job pressures for HCWs. These results support previous research that the pressures are related to the inspections, appraisal and the revalidation processes stress sources [14]. In addition to being a source of employee stress, regulatory pressures can be a threat to the organization's goals. Therefore, it is necessary for policy makers to review regulatory policies in line with organizational changes.

Role characteristics that have been highlighted in this study as an important source of stress in the workplace have been mentioned in other studies [41, 42]. Findings from a recent systematic meta-analysis indicate role-related stress as an important factor in employees' mental health [43]. Although, according to our information, studies on HCWs rarely mention the issue of providing services and supervisory and administrative tasks at the same time, this study has identified this issue as one of the important stressors of HCWs. In Iran, a health care worker has been hired for each health center who, in addition to providing health services to clients, is also responsible for other HCWs and administrative affairs. This has led to increased workload, role conflict and accountability pressures, and ultimately severe stress on HCWs.

The findings of this study are consistent with many studies that have highlighted the effect of workload on occupational stress [41, 44]. As noted by the participants in this study, with the onset of widespread changes in the health care system and the increase in the variety of services in health care delivery centers, the workload of HCWs has increased.

As part of this study was at the time of the COVID_19 epidemic, the results are evidence of increased workload and stress of HCWs during the critical period of the disease epidemic. Studies have shown that during the COVID-19 epidemic, stress and burnout of HCWs increased [45, 46, 23]. Evidence also suggests that during a pandemic of infectious diseases, stress and burnout increase among HCWs [47]. Participants in this study reported an increase in workload and stress during the COVID-19 epidemic due to screening, follow-up treatment of quarantine patients at home, and interception of high-risk contacts.

While most literatures have defined work diversity as a job source [44] in this study HCWs, despite working with different units and having a variety of jobs, find their jobs monotonous and dull. It seems that job diversity is not always desirable, and the constant repetition of tasks over time loses its appeal and becomes monotonous and dull. Probably if diversity is not accompanied by change, it becomes

monotony. This evidence suggests that organizations should design and implement motivation programs for their employees to increase the attractiveness of the workplace. On the other hand, when diversity is accompanied by increased responsiveness to superiors and increased duties, it leads to stress in employees.

Findings from studies show that employees in workplaces who are exposed to clients are prone to anxiety [14, 41]. This issue is more prominent in health care providers because their most important task is to provide health care services and especially for clients, health is an important and sensitive issue. The importance of this issue has been expressed in recent findings, which have identified the fear of error and the management of patients' complaints as sources of physician stress [14]. On the other hand, patients referred to health centers have different personal characteristics in terms of age, gender, economically, socially, culturally. The diversity of clients' characteristics causes them to have different demands of care, education, support and communication, and HCWs suffer from anxiety and distress. Scientific evidence confirms these findings [48].

Many people with a mental illness are at risk of losing their job [4]. In this study, participants, especially HCWs, with non-permanent employment contracts, stated the lack of job security as an important cause of stress and anxiety in the workplace. Non-permanent contracts appear to create differences in pay and career prospects in workplaces where employees have a variety of permanent and temporary contracts but have the same duties. In addition, they compare their employees with other colleagues and cause them to perceive injustice and distress. Other studies have cited temporary employment status as a risk factor for employees' mental health [43, 42].

Strengths and limitations

The special strength of this study is the heterogeneity of the samples so that the participants were selected from several health centers in different cities covered by two cities that have different managers and supervisors. In addition, HCWs varied in age, work experience, employment status, responsibilities, so we were able to obtain different perspectives.

Because part of this study coincided with the COVID-19 epidemic, we were unable to consider the views of HCWs during this period.

However, this study had its limitations. First, according to the purpose of this study, researchers focused on stressful job demands, but during the study found that although job and organizational demands can be direct stressors, individual demands can increase or decrease stressors. Therefore, it is recommended that the effect of individual demands on occupational stress be investigated in future studies

Second: Since most HCWs in Iran are women, in our study, all participants were women, and this was because in the study geographical area, all HCWs were women. While the evidence shows that the causes of occupational stress are different in men and women [49]

Conclusions

The results of this study provide new insights into the sources of stress in HCWs working in health care centers. Findings of this study show that after changes in the primary health care system, multiple and even different tasks have been assigned to the HCWs. This has increased the workload. In addition, increasing the number of tasks leads to an increase in the number of clients, superiors, monitors and supervisors. Changes in role have led HCWs to experience conflicts, tensions, and distress in the workplace.

Having more than one role, especially when the types of roles are different, makes the HCWs understand the distressing and painful experiences of role conflict, responsiveness, and workload. On the other hand, job security concerns in HCWs who are part-time employers have multiplied the stress. At the end of the study, the researchers found that although job and organizational demands lead to stress and anxiety in employees, some job resources can reduce stress as a job source. Therefore, policymakers can reduce the stress of HCWs by revising regulatory practices and delegating roles. On the other hand, managers can reduce the amount of occupational stress caused by clients and workload with educational support in the field of increasing communication skills and time management.

Declarations

Ethics approval and consent to participate

Conducting this research was approved by the Ethics Committee of Tarbiat Modares university (The ethics code number= IR.MODARES.REC.1397.032). All participants provided written consent for the study, were informed that the data remained confidential and anonymous during the collection, storage, analysis and dissemination stages, their participation in the study was completely voluntary and they were free to leave the study.

Consent for publication

Not applicable.

Availability of data and materials

The data of this study are not publicly available because the participants are identifiable from the information contained in the data and we are committed to keeping the information confidential.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

MZ was the main investigator, collected and analysed the data, and wrote the first draft.

AH is the dissertation supervisor and supervised the study and contributed to the writing process.

MSM contributed in the design of the study and contributed to the writing process helped

MSM and GSH were involved in revising the manuscript for intellectual content.

MZ, AH, MSM and GSH contributed to analysing qualitative data and findings were repeatedly discussed and revised by MZ, AH and GSH. AH finalized the manuscript.

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