

Scientific Paper Entitled: The Impact of Work Stress on the Quality of Health Care Services from the Perspective of Health Personnel in the Government Health Sector in the Kingdom of Saudi Arabia

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Abstract:

The study aimed to identify the various sources of work stress among doctors and nurses working in the government health sector in the Kingdom of Saudi Arabia and to identify the level of health service quality in the government health sector in the Kingdom of Saudi Arabia and to know the impact of the various sources of work stress to which doctors and nurses are exposed to the quality of service. The study followed the descriptive analytical approach, as the study was conducted on a sample of 500 individuals, divided into 300 female employees and 200 male employees at King Abdulaziz University Hospital in Jeddah. Information was obtained and collected from the respondents, and a questionnaire form was used and was designed to serve the research objectives, as The study questionnaire was designed as a tool for collecting data. The results of the study concluded that there is a high level of practical pressures that doctors and nurses are exposed to in the government health sector in the Kingdom of Saudi Arabia, and this can have a negative impact on their performance and psychological health. The study recommended improving the work structure, work distribution, and burden distribution. Fairly among health personnel, providing administrative and technical support to relieve pressure and develop psychological and social support programs.

Keywords

- work stress, Workload, physical work environment, Nature of the job, Quality, health service, hospital.

Introduction

In an era of increasing technological development and social changes, the quality of care services has become vital and crucial in our contemporary societies. The quality of care services reflects the extent to which institutions and organizations are able to meet the needs and expectations of beneficiaries of care services, whether they are patients in the medical field, students in educational institutions, citizens who use social services, or even customers in various commercial sectors. The quality of care services includes a variety of important aspects such as access to services, efficiency of care provided, responsiveness to beneficiaries' needs, interaction between providers and beneficiaries, and more. Achieving quality care services requires continuous efforts to improve processes, develop policies, and provide ongoing training for

employees, in addition to adopting innovative methods to measure and evaluate quality. By understanding the importance of quality care services and dedication to achieving it, we can build healthier and more prosperous communities, and ensure a positive and inspiring experience for everyone. Within environments that provide care services.

Work pressures are an integral part of the modern work environment, as individuals face multiple challenges while performing their job tasks. These pressures vary between time pressure, psychological, social, organizational, and skill requirements. Stress comes from multiple sources such as pressure from bosses, strict deadlines, changes in the work environment, and communication with colleagues and clients. These stressors can lead to negative impacts on individuals' mental and physical health if not dealt with effectively, and may require multiple strategies to effectively cope and maintain personal and professional life balance (Mackay CJ, Cousins R, Kelly PJ, Lee S and McCaig R.H., 2004)

Work stress can lead to a variety of negative outcomes, including financial and human losses, loss of confidence, job leakage, lack of production, and low morale. Ultimately, it can lead to the bankruptcy of the organization and the dismissal of its employees. Individuals respond to these pressures in different ways. Some persevere to achieve desired goals, while others feel frustrated and hopeless, leading to decreased productivity and high turnover at work. Researchers' interest in the phenomenon of work stress is considered relatively recent, as studies in this field began in the early twentieth century, and this interest increased, especially in the early 1980s (James E. Driskell et Eduardo Salas, 2013,)

Study Problem

This study highlights a problem related to work pressures and their impact on the quality of health services, as the government health sector in the Kingdom of Saudi Arabia faces a continuous increase in demand for health services as a result of population growth and an increase in injuries, chronic diseases and accidents. The health sector also suffers from a severe shortage of human resources. And financial, which puts additional pressure on health personnel to provide services with the best possible quality. Many health sector workers are exposed to fatigue and stress as a result of constant practical pressures and great responsibilities, which affects their performance and general health. Excessive practical pressure can lead to a decline in the quality of services. Health care, including an increase in incidents of medical errors and a

decrease in the level of care provided to patients. In short, these problems represent fundamental challenges facing health personnel in the government sector in the Kingdom of Saudi Arabia, and they directly affect the quality of health services provided to patients and visitors, so the research came to the fore, which leads to a better understanding. To address this problem and develop strategies to reduce pressure and improve quality in the government health sector in the Kingdom of Saudi Arabia.

Study questions

1. What is the level of work stress that doctors and nurses are exposed to in the government health sector in the Kingdom of Saudi Arabia?
2. What is the level of health service quality in the government health sector in the Kingdom of Saudi Arabia?
3. What is the impact of work stress on the quality of health care services from the point of view of health personnel in the government health sector in the Kingdom of Saudi Arabia?

Objectives of the study:

This study sought to achieve the following objectives:

1. Identify the various sources of work stress among doctors and nurses working in the government health sector in the Kingdom of Saudi Arabia
2. Identify the level of health service quality in the government health sector in the Kingdom of Saudi Arabia
3. Knowing the impact of various sources of work stress that doctors and nurses are exposed to on the quality of health service provided.

Study limitations

1. Time constraints: It may be difficult to allocate sufficient time to participate in the study because health personnel have busy work schedules and long shifts.
2. Data Availability: There may be limitations in the availability of requested data, whether due to limitations in access or insufficient data available to meet the needs of the study.
3. Variation in experience and insights: The level of experience and insights may vary among health personnel, which may lead to variation in responses and evaluations provided to the study.
4. Ethical Challenges Studying practical stress may face ethical challenges in collecting data and maintaining confidentiality of participants' personal information.

Previous studies

{1} Badis Boukhloua. Iman Jaafour, 2018, The impact of work stress on the quality of health service from the point of view of doctors and nurses. This study aims to identify the sources of work stress and measure its impact on the quality of health service from the point of view of doctors and nurses at the Saad Dahlab Hospital Institution in the city of Oued State University, and to achieve the goals of For the study and testing of its hypotheses, a questionnaire was designed directed to doctors and nurses working in the institution under study, and after conducting an analysis of the questionnaire data, which included (47) items for a sample of (97) doctors and nurses. The study reached a number of results, the most important of which are: doctors and nurses feel high work pressures resulting from workload, role conflict, the physical work environment, the nature of the job, and the organizational structure. These dimensions have a negative impact on the quality of health service, and there are no statistically significant differences. In the study sample members' perception of work pressures, there are differences in the study sample members' perception of service quality due to the experience variable.

{2} Janad Mbarka, 2018, Evaluating the quality of health services from the point of view of doctors and nurses in Algerian hospitals - a case study of some hospitals in the state of Setif. This study aimed to evaluate the quality of health services in Algerian hospitals from the point of view of their makers, by surveying the opinions of a sample of doctors and nurses. In some hospitals in the state of Setif to identify possible shortcomings. This study concluded that there is a general trend towards evaluating the health services provided in the hospitals under study in the middle school, in addition to the presence of statistically significant differences between the opinions of doctors and nurses about the desire to improve these services due to the job variable.

{3} A study by Nima Muhammad Baiti (2021) that dealt with work pressures and their impact on the performance of female employees within the organization. The study aimed to review the components and sources of stress at work, its results and effects, by reviewing examples from management and human behavior scholars. The study showed the results of a field analysis of the relationship between work pressures and the quality of performance in the company, and identified appropriate methods to address this problem and its negative effects. A descriptive analytical approach was used for data

from a sample of workers in departments at different levels at Sudanese Airlines, with the use of multiple statistical methods to analyze the data and determine important statistical relationships. The study concluded that there is a positive relationship between work stress and increased employee productivity, and an inverse relationship between work stress and the quality of employee performance.

{4} A study conducted by Mabrouk Ben Takouka and Al-Ayachi Saed Al-Massoud in 2022 explored the impact of work stress on employee performance in public administration, using a case study of the Bordj Bou Arreridj Employment Directorate. The study aimed to understand how internal factors of work stress, such as role stress, role conflict, role ambiguity, and the physical work environment, affect employees' performance. A questionnaire distributed to all thirty employees in the studied directorate was used as a data collection tool. The results showed that work pressure negatively affects employee performance, and that the greatest impact was from the physical work environment, then role stress, and role conflict. The study noted that there was no negative effect of role ambiguity on job performance.

Study Methodology

The study followed the descriptive analytical approach, which depends on obtaining accurate information that depicts reality and contributes to the analysis of its phenomena based on the accurate information collected. Several Arab and foreign sources were used, including books and university theses, as well as articles published in a number of international magazines.

Study participants

- Participants are all employees of King Abdulaziz University Hospital in Jeddah

The study sample

The study was conducted on a sample of 500 individuals, divided into 300 female and 200 male employees

Study tool and design stages

Information was obtained and collected from the respondents, and a questionnaire form was used, which was designed to serve the research objectives. The study questionnaire was designed as a tool for collecting data.

External validity (content validity) of the study tool:-

Validity of an instrument refers to ensuring that it measures what it purports to measure. The researcher designed the

questionnaire based on the observations and suggestions made by experts in this field.

After completing a questionnaire on the impact of work stress on the quality of health care services from the perspective of health personnel in the government health sector in the Kingdom of Saudi Arabia

By applying it to King Abdulaziz University Hospital in Jeddah, it was distributed to a group of doctors and specialists with experience in the field. The questionnaire was divided into two axes:

1. The first section contains primary data about the respondents
2. The second axis includes the study axes, and each axis has a set of options

Results

Validity and Reliability Tests:

Internal Consistency Reliability Calculation:

The study tool was constructed, and after being shown to a panel of knowledgeable and experienced arbitrators to confirm its apparent validity, Pearson's Coefficient Correlation was calculated to confirm the validity of the internal consistency between each goal's statement and the belonging axis' overall score. The questionnaire was administered to a pilot sample of 40 healthcare staff to confirm internal reliability, with researchers calculating correlation coefficients to assess the internal validity of the study tool, as the following tables show:

Table (1): Correlation coefficients of each item in the total score of work stress on the quality of health care services

Statement number	r
1	0.741**
2	0.812**
3	0.782**
4	0.846**
5	0.688**
6	0.634**
7	0.589**
8	0.627**
9	0.854**
10	0.881**

** : p value <0.001

It is clear from the previous table that all of the statements are significant at the 0.01 level, as the values of the dimensional correlation coefficients ranged between (0.589 - 0.881), which are good correlation coefficients, indicating high internal consistency coefficients as well. It indicates high validity indicators that can be trusted in applying the current study tool.

Reliability of the study tool:

As for measuring the reliability of the questionnaire, we used Cronbach's alpha coefficient, and the following table shows the reliability axes of the study tool as follows:

Table (2): Cronbach's alpha coefficient reliability coefficient for the total score of the questionnaire

	No. of statements	Cronbach's alpha
Work stress	10	0.901

The table showed that Cronbach's alpha reliability coefficient for the total score of the questionnaire was (0.901), which is a high-reliability coefficient suitable for the study.

Application Method of the Study Tool:

Prior to entering the study data into the computer for statistical analysis, the researchers examined it after gathering it. They then analyzed it, put it into the relevant tables, and made connections to earlier research. Five points were awarded for different responses: strongly disagree (1 point), disagree (2 points), agree (4 points), and agree (3 points). The range (5-1=4) was computed and divided by the number of questionnaire cells to give the correct cell length ($4/5=0.80$), which was then utilized to establish the length of the pentavalent scale cells used in the study Phrases. The upper limit of the cell was then calculated by adding this number to the scale's lowest value, which is one, or the scale's beginning. The following table illustrates the method for correcting the Likert pentavalent scale.

Table (3): Method for correcting the scale.

Scale	The weight	The average arithmetic mean value ranges
Strongly Disagree	1	From 1 to less than 1.80
Disagree	2	From 1.81 to less than 2.60
Neutral	3	From 2.61 to less than 3.40
Agree	4	From 3.41 to 4.20
Strongly agree	5	From 4.21 to 5.

Table (4): Socio demographic characteristics of the studied participants

Sociodemographic variables	Cases (n=500)	
	No.	%
Age category (years)		
Min – Max	22 – 58	
Mean + SD	38.65 ± 11.25	
Gander		
Male	300	60.0%
Female	200	40.0%
Marital status		
single	204	40.8%
married	148	29.6%
Divorced	46	9.2%
Widow	102	20.4%
Type of the work		
governmental work	272	54.4%
private job	228	45.6%
Educational status		
University	162	32.4%
Non-university.	100	20%
Master	148	29.6%
Ph.D	90	18%

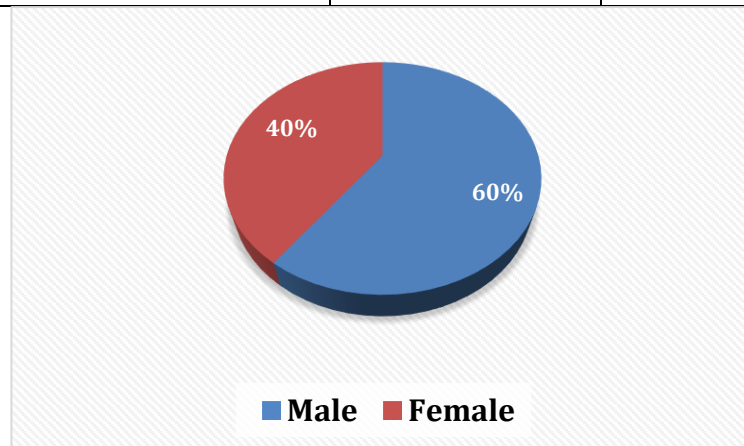


Fig (1): gander distribution among the studied participants

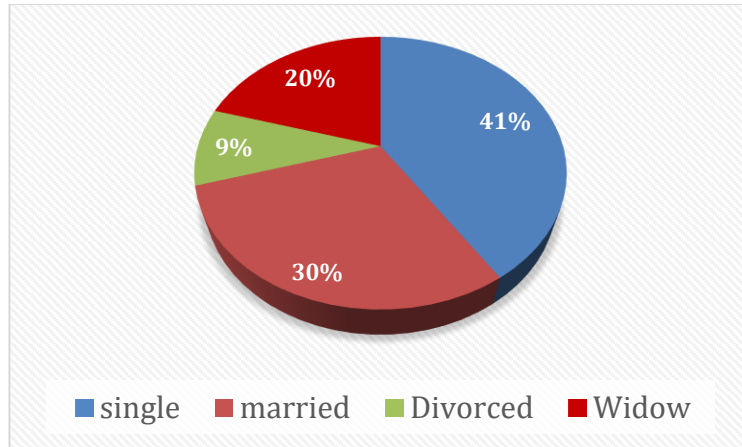


Fig (2): marital status distribution among the studied participants

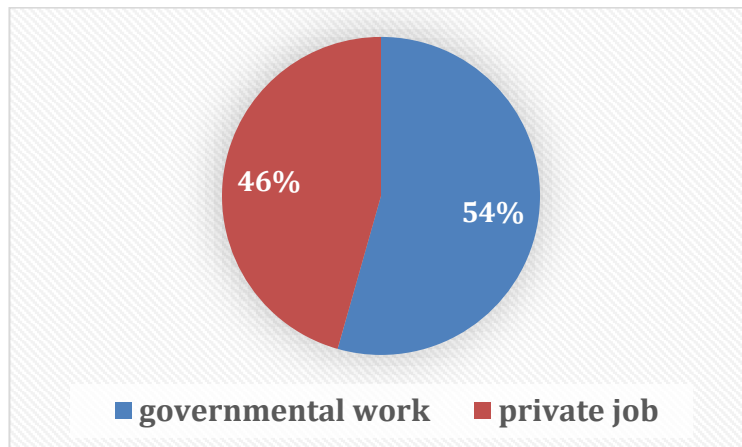


Fig (3): type of work among the studied participants

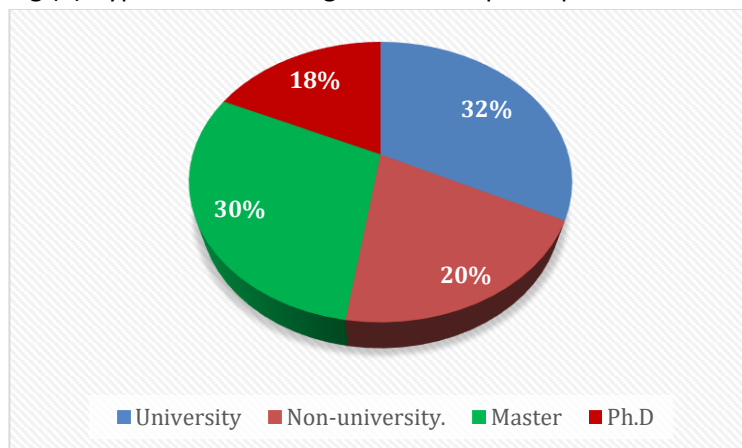


Fig (4): educational level distribution among the studied participants

Table (1) & Figure (1-4) showed that the age of the studied participants ranged from 17 – 54 with a mean of 38.36 ± 14.25 . Regarding to the gender, 52.4% were males and 47.6% were females. 40.8% were single. As regard to the type of work, 51.6% worked in governmental places. 32.4 % of the studied participants were university educated while 18% were non university.

Secondly: impact of work stress on the quality of health care services from the perspective of health personnel in the government health sector in the Kingdom of Saudi Arabia

Table (5): response of the studied participants regarding to work stress

No.	work stress	Cases (n=500)			
		Mean	SD	Category	Rank
1-	Work pressures affect the quality of health care provided by the government health sector	4.59	0.77	Strongly Agree	1
2-	There is a shortage of human resources in the field of health care in the Kingdom of Saudi Arabia	4.32	0.85	Strongly Agree	5
3-	You face difficulties in time management due to work pressures	4.19	0.80	Strongly Agree	6
4-	Work pressures may lead to higher rates of medical error	4.54	1.17	Strongly agree	2
5-	You receive the necessary support from management to deal with work pressures	3.01	1.28	Neutral	10
6-	There is a need to improve the work environment to reduce work pressures	4.01	1.05	Agree	7
7-	Additional training programs can help improve health personnel's handling of work stress	3.31	0.99	Neutral	9
8-	There is a lack of communication between health personnel in the work environment	4.42	0.79	Strongly Agree	3
9-	There is insufficient evaluation and follow-up of the quality of health services in the hospital	4.41	0.76	Strongly Agree	4
10-	There is a need to increase awareness of the importance of workers' health and its impact on the quality of health care provided	3.41	0.79	Neutral	8
Total score		4.21	0.71	Agree	

Table (5) showed the response of the studied participants as regard to The impact of work stress on the quality of health care services from the perspective of health personnel in the government health sector in the Kingdom of Saudi Arabia.

It was found that the majority strongly agree with the statement(1): Work pressures affect the quality of health care provided by the government health sector and this came in the first rank (4.59), statement (4) Work pressures may lead to higher rates of medical error and this came in the second rank (4.54), statement (8) There is a lack of communication

between health personnel in the work environment and this came in the third rank (4.42), statement (9) There is insufficient evaluation and follow-up of the quality of health services in the hospital and this came in the fourth rank (4.41), statement (2) There is a shortage of human resources in the field of health care in the Kingdom of Saudi Arabia and this came in the fifth rank (4.32). while they agree with statement (3) You face difficulties in time management due to work pressures and this came in the sixth rank (4.19), statement (6) There is a need to improve the work environment to reduce work pressures and this came in the seventh rank (4.01). however, they neutrally agree with statement (10) There is a need to increase awareness of the importance of workers' health and its impact on the quality of health care provided and this came in the eighth rank (3.41), statement (7) Additional training programs can help improve health personnel's handling of work stress and this came in the ninth rank (3.31) and statement (5) You receive the necessary support from management to deal with work pressures and this came in the last rank (3.01).

Discussion:

1. The level of work stress for doctors and nurses in the government health sector in the Kingdom of Saudi Arabia:

- Analysis of the factors that cause pressure on health personnel in the government health system.
- Review the different dimensions of pressure, such as the excessive number of patients, excessive administrative tasks, technical challenges, and others.

2. The level of health service quality in the government health sector in the Kingdom of Saudi Arabia:

- Evaluating the quality of health services based on specific criteria, such as the time required to receive the service, the level of interaction with patients, the accuracy of diagnosis and treatment, and others.
- A comparison between the current level of service and the specified standards for health service quality.

3. The impact of work stress on the quality of health care services from the perspective of health personnel:

- Surveying the opinions of health personnel about the impact of pressure on the quality of the services they provide.
- Analyze the factors that increase the impact of work stress on the quality of health care, such as fatigue and lack of time.

Results:

- After analyzing the data and discussing the questions mentioned above, the following results can be reached:

1. Level of work stress:

- It has been shown that there is a high level of practical stress that doctors and nurses are exposed to in the government health sector in the Kingdom of Saudi Arabia, and this can have a negative impact on their performance and psychological health.

2. Level of health service quality:

- It appears that there are challenges in providing quality health services in the government sector, and practical pressures may be among the factors influencing this matter.

3. The effect of work stress on the quality of health care:

- An analysis of the opinions of health personnel confirms that there is a negative impact of work pressures on the quality of health care provided, which requires taking measures to alleviate these pressures and improve the quality of service.

Recommendations:

Based on the previous results, the following recommendations can be proposed:

1. Improving the work structure and distribution of work: - Distributing burdens fairly among health personnel, and providing administrative and technical support to relieve pressures.
2. Developing psychological and social support programmes:- Providing awareness programs and psychological and social support for health personnel to deal with practical pressures.
3. Improving the work environment: Providing a healthy and safe work environment, and encouraging an appropriate culture of health care at all levels.
4. Enhancing communication and interaction with patients:- Encouraging effective communication between health personnel and patients to improve the quality of service and better meet their needs.

Reference

- Mackay CJ, Cousins R, Kelly PJ, Lee S and McCaig RH, 2004, "Management Standards" and work-related stress in the UK: Policy background and science. *Work & Stress* 18; 2, 91-112
- James E. Driskell et Eduardo Salas, 2013, "Stress and Human Performance Psychology Press Lawrence Erlbaum Associates éditeurs.

- Nima Muhammad Baiti (2021) Work pressures and their impact on the performance of female employees within the organization. Arab Journal of Literature and Human Studies, Arab Foundation for Education, Science and Arts, vol. 5, no. 20, pp. 247-246.
- Mabrouk Ben Takouka, Al-Ayachi Saed Al-Masoud, 2022, The impact of work pressures on employee performance in public administration, a case study of the Directorate of Employment in Bordj Bou Arreridj, Mohamed Bachir Brahimi University, Faculty of Economic, Commercial and Management Sciences
- Badis Boukhroua. Iman Jaafour, 2018, The impact of work stress on the quality of health service from the point of view of doctors and nurses, Algerian Institutions Performance Journal, Volume 7, Issue 3, pages 248-267
- Janad Mbarka, 2018, Evaluating the quality of health services from the point of view of doctors and nurses in Algerian hospitals - Journal of Economic Studies, Volume 12, Issue 4, pages 196-209