

Assessment of Level of Stress among the HealthcareProfessionals Working In Operating Room at a Tertiary Care Teaching Hospital

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Name Of Course	Short Term Certificate
	Course Operation TheatreNursing
Academic Year	Jul-Sep 2023
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Name Of Research Study	A Descriptive Study To Assess The Level Of StressAmong
	The Healthcare Professionals Working InOperating Room
	At A Tertiary Care Teaching Hospital
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Date of Submission: 25-07-2024

Date of Acceptance: 05-08-2024

I. INTRODUCTION

"It's not the stress that kills us, it's our reaction to it" -Hans Selve

An OT environment work milieu is problematic in terms of patient's safety and is closely associated with elevated stress. The major source of stress such as work load, staff shortage, emergency calls, prolonged surgery, inadequate equipment & supplies and long working hours of this group of professionals led to their work environment as overwhelming¹.

Workplace stress is the harmful physical and emotional responses that can happen when there is conflict between job demands on the employee and the amount of control an employee has over meeting these demands². Stress in workplace may be due to single or multiple reasons which mayaffect both professional and personal life of healthcare worker. It is usually considered as challenges by some people but when it exceeds the level of tolerance it can have adverse effects on both mental and physical wellbeing of an individual which may lead to severe consequences even suicidal tendency¹.

Work related stress refers to an individual reaction when confronted with work demands and pressure that are no match to their knowledge abilities and challenge their coping capability. Occupational stress occurs when an individual perceives the work environment as challenging, threatening and damaging to the persons coping³. International bodies like WHO and ILO have recognised stress among health care worker and the probable destructive effect of workplace as aglobal menace⁴.

In this study the researchers are intended to assess the level of stress faced by each individual working in OT. So that appropriate measures may be taken for resolving it in future in order to prevent unforeseen events.

NEED FOR THE STUDY

Professional life is an important part of a person's daily life which is associated with many aspects of job³. The individual may be satisfied or not with one or more aspects of the job. Healthcare system is an area where there is lot of challenges and changes which occur every now and then and healthcare professionals face many difficulties in coping with the new changes². They need to work longer and harder to maintain the work load. This leads to stress and burnout among health care professionals working in the hospitals.

Prevalence of stress in a 2022 survey of



11,964 nurses found that over 70% nurses are experiencing high stress and burnout in US. According to another study conducted by the Indian Medical Association, it has been found that 82% of doctors in India experience high level of stress. The study revealed that most doctors do not get enough sleep⁵.

A cross-sectional survey conducted among 204 healthcare professionals in the ICUs of multispeciality hospital in South India using Job Satisfaction Scale, perceived stress scale and Maslach burnout inventory showed a prevalence of high burnout of 80% which included 6% doctors and 69% of nurses. It inferred that the critical care societies should come forward to draftpolicies and benchmarks to curb the causes of stress, reduce burnout and increase the jobsatisfaction⁶.

We being healthcare professionals felt that there is a need to assess stress among our healthcare professions working in OT as they may also be also facing with some or other work- related stress.

II. OBJECTIVES

The objective of a study includes obtaining answers to the research questions or testing hypothesis but may also encompass some broader aims like developing recommendations forchanges to nursing practice based on study results.

OBJECTIVES OF THE STUDY

- 1. To assess the level of stress among health care professionals in OT.
- 2. To associate the level of stress scores with selected demographic variables.

OPERATIONAL DEFINITION

- DESCRIPTIVE STUDY: It is study used to obtain information concerning the currentstatus of the phenomena to describe "what exists" with respect to variables or condition in a situation
- ASSESS: Assessment refers to the collection of data to describe or to better understandan issues.
- STRESS: Stress can be defined as a state of worry or mental tension caused by a difficult situation.
- HEALTHCARE PROFESSIONALS: Healthcare professional means a medical practitioner, dental practitioner, pharmacist, clinical psychologist, nurse, midwife, medical assistant, physiotherapist, occupational therapist and other allied healthcare professionals under the jurisdiction of Ministry of Health
- **OPERATING ROOM**: The operating room of

OT is a large sterile room where surgeons operate on patients. It is equipped with surgical tables, monitors and equipment necessary for surgery. There are many types of operating rooms depending on the type of surgery.

VARIABLES:

A variable is a property, a characteristic, a number or a quantity that increases or decreases over time or can take on different values (as opposed to constants such as that do not vary) in different situations.

Demographic variables in this study are age, gender, marital status, educational qualification, work experience and profession.

Research variable in this study is stress related to work.

III. REVIEW OFLITERATURE

"Literature allows us to be open, to listen, and to be curious"

-Tracy k smith

Review of literature is a key step in research process. It is an account of what is already known about a particular phenomenon. A literature review is a synopsis of another researcher. Moreover, it is a critical appraisal of another research on a given topic that helps to put that topic in context. A literature review is an objective, thorough summary and critical analysis of the relevant availableresearch and non-research literature on the topic being studied.

A cross sectional study conducted to determine the prevalence and factors associated with occupational stress among 388 OT clinicians at university hospitals in Northwest Ethiopia in 2021 showed that 78.4% had occupational stress and factors associated with the stress, working more than 80hrs per week, use of recreational substances, being an anaesthetist, and being a nurse were found maximally associated with occupational stress⁷.

A descriptive study to clarify job stress of healthcare workers in 20 hospitals in Japan was conducted using Brief Job Stress Questionnaire to measure job stressors, stress responses, and social supports. The result showed that total health risk of the health care workers was 10% higher than the national average. While the physicians felt that stress of the quantitative and qualitative job overload, they had support from supervisors and coworkers and showed mild stress responses. The nursing staff felt the stress of the quantitative and qualitative job overload at the same level as the physicians but they did not have sufficient support from supervisors, and co-workers and showed high stress responses. The administrative workers did not have sufficient support from supervisors and co-



workers, but they experienced less stress as measured by the quantitative and qualitative job overload then the physicians or the nursing staff and showed moderate stress responses⁸.

According to a systemic review conducted by Kushal A, et al. on stress among healthcare professionals, there was a co-relation that exists between work stress and many other factors. Poor health in turn reduces human efficiency due to lack of alertness, focus and similar problems. In hisstudy 59% had moderate stress which requires better stress management. It also inferred 62% of the population had stress associated symptoms⁹.

A similar study conducted by A Boran, et al. with similar objectives in middle eastern countries among 402 health care Professionals, reported 27% of workers had high level of stress. Factors associated with high Stress were being a general practitioner, being a woman and having long working hours. Dealing with uncooperative patients and heavy workloads were also considered as additional stressors. The most frequent problem associated with high level of stresswere irritability (58%), consuming more arousal drinks (coffee, cola), difficulty in concentrating (51%), headaches (63%), chronic Back pain (48%) and common colds (47%)¹⁰.

A cross sectional study was conducted to explore the relationship between occupational stress and coping strategies among 70 operating theatre nurses in China using a questionnaire survey. The results showed that nurses occupational stress is positively corelated with designationand negatively corelated with operation sets per day and night shifts. It also inferred that active coping was positively related to resource and environmental problems and passive coping was positively related to workload and time pressure and to interpersonal relationship and management issues. Study concluded that nursing managers could reduce operating theatre nurses passive coping by decreasing the stressors of workload and time pressure, and interpersonal relationships and management problems¹¹.

IV. RESEARCH METHODOLOGY

Research methodology is a systematic step to solve the research problem. It includes the strategies to collect and analyze data, accomplish the research objectives and test the research hypothesis.

This chapter deals with the methodology adopted for "A descriptive study to assess the level of stress among the healthcare professionals working in operating room at a tertiary care teaching hospital."

- Research approach
- Type of study
- ✤ Sample criteria
- Ethical consideration
- Sampling technique
- Tool
- Data collection procedure

RESEARCH APPROACH

The research methodology includes the strategies to be used in collecting and analyzing data to accomplish the research objectives. In this study the approach used by researcher is non experimental approach.

RESEARCH DESIGN

Research design used in this study is Quantitative design

SAMPLING CRITERIA

Inclusion criteria- All the health care personnel working in operation theatre of tertiary careteaching Hospital willing to participate in the study with more than one year of experience

Exclusion criteria- All housekeeping staffs working in OT

ETHICAL CONSIDERATION- Formal permission for the study was obtained from the concerned authority and clearance from ethical Committee of the Hospital was obtained prior to conducting study. Informed written consent from the samples were obtained and the anonymity and confidentiality of subjects were maintained.

SAMPLING TECHNIQUE- Convenient sampling technique was adopted. The duration of sampling was for the period from 25.08.2023 to 31.08.2023.

A total of 80 health care personnel working in OT were assessed for work related stress. Samplesonce assessed were not repeated again throughout the study period.

TOOL- A four-point Likert scale with selfexplanatory statements developed by ICMR was used to collect the data which included 32 questions regarding work stress.

DATA COLLECTION PROCEDURE- The data collection was done from 25.08.2023 to 31.08.2023 in tertiary care teaching hospital. Data collection was done by administering work stress questionnaire to all healthcare personnels working permanently in OT for more than a year.

The individuals took 15 -20 minutes to fill the questionnaire. Doubts if any, where clarified by the

This chapter includes:



International Journal Dental and Medical Sciences Research Volume 6, Issue 4, July. – Aug. 2024 pp 216-228 www.ijdmsrjournal.com ISSN: 2582-6018

researchers.

V. RESULTS

Analysis is a process of organizing and synthesizing data in such a way that research questions are answered and hypothesis can be tested. The purpose of analysis is to reduce the datato an intelligible and interpreted form so that the relation of research can be studied.

This chapter deals with the analysis and interpretation of data obtained from samples who participated in the study, "A descriptive study to assess the level of stress among the healthcare professionals working in operating room at a tertiary care teaching hospital."

The collected data was tabulated in master sheet and analyzed using descriptive and inferential statistics.

OBJECTIVES OF THE STUDY

The objectives of the study were:

1. To assess the level of stress among health care

professionals in operating room.

2. To associate the level of stress scores with selected demographic variables.

ORGANIZATION OF THE FINDINGS

The findings of the study are organized and presented under following headings:

Section I: Description of demographic variables Section II: Frequency and percentage distribution of stress score of health care professionalsin OT. Section III: Association between demographic variables and stress score as calculated usingChi-Square test.

Section I: Description of demographic variables

Analysis of demographic data of the sample is described in terms of age, sex, marital status, education, profession and years of experience. The frequency and percentage distribution of respondents according to demographic

characteristics are shown in the table.

	^	Respondents	
		Number	Percentage (%)
Characteristics	Category		
	20-30years	18	22.5
	31-40years	37	46.3
Age Group (Years)	41-50years	21	26.3
	Above 50 years	4	5
	Male	67	83.8
Gender	Female	13	16.3
	Married	68	85
Marital status	Single	12	15
	Diploma	14	17.4
	Graduate	33	41.3
Education	Post graduate	33	41.3
	Less than 10 years	37	46.3
	10-20 years	30	37.5
Work experience	More than 20 years	13	16.3
	Surgeon	19	23.8
	Anesthetist	6	7.5
	Ot matron	5	6.3
	Resident	18	22.5
Profession	ORA	32	40

 Table 5.1: Classification of respondents according to demographic characteristics

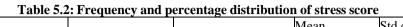
Table 5.1 showed that 46.3% of the respondents belonged to age group of 31-40 years. 83.8% of them were males, 85% were married. It also showed that graduates and post graduates were equally distributed about 41.3%. 46.3% of them had

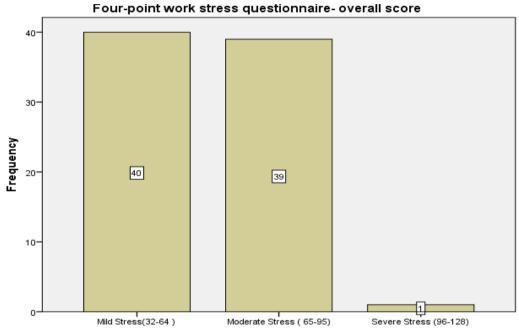
work experience of less than 10 years. Most of OT health professionalswhere ORA (40%).

Section II: Frequency and percentage distribution of stress scores of health care professionalsin OT.



1 able 5.2	2. Frequency and p	er centage uisti ibutior	1 01 511 655 5001 6	
			Mean	Std deviation
Parameters	Frequency	Percentage (%)		
Mild Stress (32-64)	40	50.0		
Moderate Stress (65-95)	39	48.8		
Severe Stress (96-128)	1	1.3	65.26	10.37
Total	80	100.0		





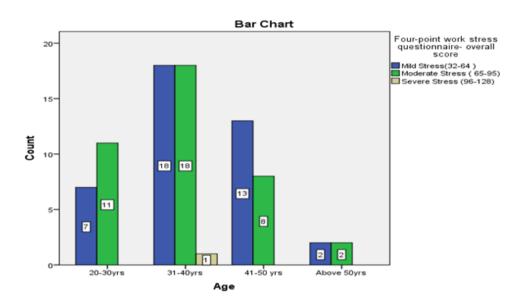
Four-point work stress questionnaire- overall score

On assessment of the Four-point work stress questionnaire, 40 (50.0 %) respondents had Mild Stress with a score between 32-64. 39 (48.8%) respondents had moderate Stress with a score between 65-90. 1(1.3 %) respondent had severe Stress with a score between 90-128. The score ranged between 44 and 99 with an average of 65.26 $SD \pm 10.371.$

Section III: Association between demographic variables and stress scores of respondents. Table 5.3. Association between age and stress score of respondents

Characteristics	Category	Mild Stress (32-64)	Moderate Stress (65-95)	Severe Stress (96-128)	df	□ ² values	P value	Inference
Age	20-30yrs	7	11	0	6	0.774	12.59	NS
0		38.9%	61.1%	0.0%				
	31-40yrs	18	18	1				
	-	48.6%	48.6%	2.7%				
	41-50 yrs	13	8	0				
	-	61.9%	38.1%	0.0%				
	Above50yrs	2	2	0				
		50.0%	50.0%	0.0%				





In the present study, in the age group 20-30yrs 38.9% had Mild Stress (32-64) and 61.1% had Moderate Stress (65-95) respectively .Similarly in the age group 31-40yrs 48.6% had Mild Stress(32-64), 48.6% had Moderate Stress (65-95) and 2.7 % had Severe Stress (96-128) respectively. Among age group of 41-50yrs 61.9% had Mild Stress (32-64), and 31.8% had Moderate Stress (65-95) respectively .And above the age of 50 years 50% had mild stress and 50% had moderatestress. There was no significant association of the levels of stress and the age with a p value < 0.5.

Characteristics		()		Severe Stress (96- 128)	df	□ ² values	P value	Inference
	Males	34	32	1	2	0.851	5.991	NS
		50.7%	47.8%	1.5%				
Gender	Females	6	7	0				
		46.2%	53.8%	0.0%				

Table 5.4: Association between gender and stress score of respondents

In males 50.7% had Mild Stress (32-64), 47.8% had Moderate Stress (65-95) and 1.5% had Severe Stress (96-128) respectively. In females 46.2% had Mild Stress (32-64), 53.8% had Moderate Stress (65-95) and none had Severe Stress (96-128) respectively. There was no significant association of the levels of stress and gender with a p value < 0.5.

Table 5.4: Association between Marital status and stress score of respondents	S
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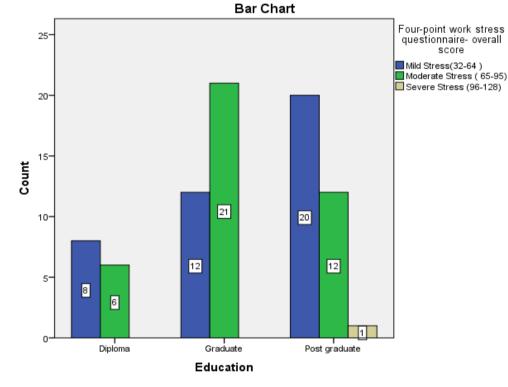
Characteristics	Category	Mild Stress (32-64)	· /	Severe Stress (96-128)		□2 values	P value	Inference
	Married	34	33	1	2	0.913	5.991	NS
		50.0%	48.5%	1.5%				
Marital status	Single	6	6	0				
		50.0%	50.0%	0.0%				

Among the married individuals 50.0% had Mild Stress (32-64), 48.5 % had Moderate Stress (65-95) and 1.5% had Severe Stress (96-128) respectively. Among single individuals 50.0% had Mild Stress (32-64) and 50.0 % had Moderate Stress (65-95) respectively. There was no significant association of the levels of stress and the age with a p value < 0.5.



Characteristic	Category	Mild Stress (32-64)	Moderate Stress (65-95)	Severe Stress (96-128)	df	□2 values	P value	Inference
Education	Diploma	8	6	0	4	0.186	9.488	NS
		57.1%	42.9%	0.0%				
	Graduate	12	21	0				
		36.4%	63.6%	0.0%				
	Post	20	12	1				
	graduate	60.6%	36.4%	3.0%				

Table 5.5: Association between education and stress score of respondents

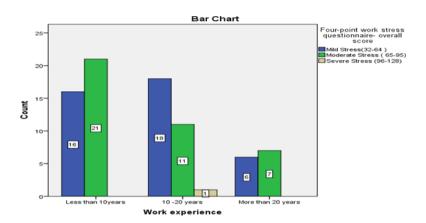


Among the diploma holders 57.1% had Mild Stress (32-64), 42.9% had Moderate Stress (65-95) respectively. Among the 36.4% graduates 36.4% had Mild Stress (32-64), and 63.6% had Moderate Stress (65-95) respectively. Among the Post graduates 60.6% had Mild Stress (32-64), 36.4% had Moderate Stress (65-95) and 3% had Severe Stress (96-128) respectively. There was no significant association of the levels of stress and the age with a p value < 0.5.

Table 5.6: Association between wor	rk experience and stress	s scores of respondents
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Characteristic		Mild Stress (32-64)	Moderate Stress (65-95)	Severe Stress (90 128)	df -	□2 values	P value	Inference
Work experience	Less than	16	21	0	4	0.393	9.488	NS
	10years	43.2%	56.8%	0.0%				
	10 - 20	18	11	1				
	years	60.0%	36.7%	3.3%				
	More	6	7	0				
	than 20years	46.2%	53.8%	0.0%				

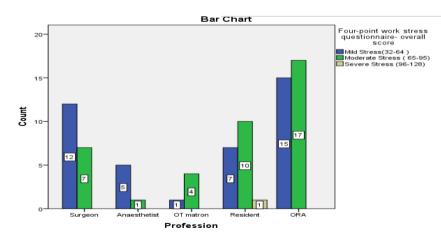




Among those who had a work experience of less than 10years 43.2% had Mild Stress (32-64), 56.8% had Moderate Stress (65-95) respectively. Among those who had a work experience between 10 and 20 years 60.0% had Mild Stress (32-64), 36.7% had Moderate Stress (65-95) and 3.3% had Severe Stress (96-128) respectively. Among those who had a work experience of more than 20 years 46.2% had Mild Stress (32-64), 53.8% had Moderate Stress (65-95) respectively. There was no significant association of the levels of stress and the age with a p value < 0.5.

Table 5.6: Association between Profession and stre	ess scores of respondents
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Characteristic	Category	()	Moderate Stress (65-95)	Severe Stress (96- 128)	df	□2 values	P value	Inference
Profession	Surgeon	12	7	0	8	0.268	15.507	NS
	-	63.2%	36.8%	0.0%				
	Anesthetist	5	1	0				
		83.3%	16.7%	0.0%				
	ОТ	1	4	0				
	matron	20.0%	80.0%	0.0%				
	Residents	7	10	1				
-		38.9%	55.6%	5.6%				
	ORA	15	17	0				
		46.9%	53.1%	0.0%				



Among those who were Surgeons 63.2% had Mild Stress (32-64), 36.8% had Moderate Stress



(65-95) respectively. Among the Anesthetists 83.3% had Mild Stress (32-64), and 16.7% had Moderate Stress (65-95) respectively. Among the OT matrons had 20% Mild Stress (32-64), and 80.0 had Moderate Stress (65-95) respectively. Among the Resident had 38.9% Mild Stress (32-64), 55.6% had Moderate Stress (65-95) and 5.6% had Severe Stress (96-128)

respectively. Among the ORA 46.9% had Mild Stress (32-64) and 53.1% had Moderate Stress (65-95). There was no significant association of the levels of stress and the age with a p value < 0.5.

VI. DISCUSSION

The present study was conducted with the aim to assess the stress level among the healthcare professionals working in operating room at a Tertiary care teaching hospital and foundthat staff in the age group 20-30yrs 38.9% had Mild Stress (32-64) and 61.1% had Moderate Stress (65-95) respectively. A study conducted on occupational stress of operating room staff of hospitalin Isfahan reported that 57.4% has mild stress and 42.6% had moderate stress¹².

A study conducted on level of stress among Gorgan University of medical sciences hospital operation room's personals in Iran and its relation to some related factors reported that 54.4% of all personals had a mild stress and in related factor like inconvenient smells the highest with 76% and other factors with 29.7% and personnel equipment was 42.6%.¹³

A study conducted on occupational stress among operation room clinicians at Ethiopian University hospitals in Ethiopia revealed that 87.0% of anaesthetists were found to have occupational stress which was highest compared to the nurses and surgical staff¹⁴.

A study was conducted to assess the level of work-related stress and coping strategies among staff nurses working in operation theatre at NMCH, Nellore reported that 66.7% have moderate stress and about 33.3% are suffering from severe stress. And in relation to coping strategies among OT staff nurses be56.7% belongs to moderate stress group and 43.3% belongs tosevers stress group¹⁵.

A cross-sectional study conducted on occupational stress among operating room nurses of hospitals affiliated to Kerman universities of medical sciences in Iran in 2016 reported operation room nurses rated situations of the "death and dying" subscale as the most stressful and the situation of "discrimination" were described as less stressful¹⁶.

VII. CONCLUSION PROBLEM STATEMENT

"A descriptive study to assess the level of stress among the healthcare professionals working in operating room (OT) at a tertiary care teaching hospital"

Based on the findings of the study following conclusions has been drawn;

1 Findings related to description of demographic characteristics of sample

- In the Age group 20-30yrs, 38.9% had Mild Stress (32-64) and 61.1% had Moderate Stress (65-95) respectively.
- Age group 31-40yrs 48.6% had Mild Stress (32-64), 48.6% had Moderate Stress (65-95)and 2.7% had Severe Stress (96-128) respectively.
- Age group 41-50yrs had 61.9% Mild Stress (32-64), and 31.8% had Moderate Stress (65-95) respectively.
- Above age of 50 years 50 % had mild stress and 50 % had moderate stress. There was no significant association of the levels of stress and the age with a p value < 0.5.

1. Findings related to gender comparison

- In the males 50.7% had Mild Stress (32-64), 47.8% had Moderate Stress (65-95) and 1.5% had Severe Stress (96-128) respectively.
- In the females 46.2% had Mild Stress (32-64), 53.8% had Moderate Stress (65-95) and none had Severe Stress (96-128) respectively.
- There was no significant association of the levels of stress and the age with a p value < 0.5.
- 2. Findings related to marital status correlation
- Married individuals 50.0% had Mild Stress (32-64), 48.5 % had Moderate Stress (65-95) and 1. 5% had Severe Stress (96-128) respectively.
- Single individuals 50.0% had Mild Stress (32-64) and 50.0 % had Moderate Stress (65-95) respectively.
- There was no significant association of the levels of stress and the age with a p value < 0.5.
- 3. Findings related to education correlation
- Among the diploma holders 57.1% had Mild Stress (32-64), 42.9% had Moderate Stress(65-95) respectively.
- Among the 36.4% graduates 36.4% had Mild Stress (32-64), and 63.6% had ModerateStress (65-95) respectively.
- Among the Post graduates 60.6% had Mild Stress (32-64), 36.4% had Moderate Stress (65-

DOI: 10.35629/6018-0604216228



International Journal Dental and Medical Sciences Research Volume 6, Issue 4, July. – Aug. 2024 pp 216-228 www.ijdmsrjournal.com ISSN: 2582-6018

95) and 3% had Severe Stress (96-128) respectively.

- There was no significant association of the levels of stress and the age with a p value < 0.5.
- 4. Findings related to work experience correlation
- Among those who had a work experience of less than 10years 43.2% had Mild Stress (32-64), 56.8% had Moderate Stress (65-95) respectively.
- Among those who had a work experience between 10 and 20 years 60.0% had Mild Stress (32-64), 36.7% had Moderate Stress (65-95) and 3.3% had Severe Stress (96-128) respectively.
- Among those who had a work experience of more than 20 years 46.2% had Mild Stress (32-64), 53.8% had Moderate Stress (65-95) respectively.
- There was no significant association of the levels of stress and the age with a p value < 0.5.
- 5. Findings related to profession correlation
- Among those who were Surgeons 63.2% had Mild Stress (32-64), 36.8% had ModerateStress (65-95) respectively.
- Among the Anesthetists 83.3% had Mild Stress (32-64), and 16.7% had Moderate Stress(65-95) respectively.
- Among the OT matrons had 20% Mild Stress (32-64), and 80.0 had Moderate Stress (65-95) respectively.
- Among the Resident had 38.9% Mild Stress (32-64), 55.6% had Moderate Stress (65-95) and 5.6% had Severe Stress (96-128) respectively.
- Among the ORA 46.9% had Mild Stress (32-64) and 53.1% had Moderate Stress (65-95)
- There was no significant association of the levels of stress and the age with a p value < 0.5

OVERALL SCORE OF OUR RESEARCH

The study showed that 40 (50.0 %) respondents had Mild Stress with a score between 32-64. 39(48.8) respondents had moderate Stress with a score between 65-90 .1(1.3%) respondents hadsevere Stress with a score between 90-128. The score ranged between 44 and 99 with an averageof 65.26 SD + 10.371

SUMMARY

Problem Statement

The present study aimed to assess the level of stress among the healthcare professionals working in operating room at a tertiary care teaching hospital.

Objective of the study were

- 1. To assess the level of stress among health care professionals in OT.
- 2. To associate the level of stress scores with selected demographic variables.

The study assumes that:

- The healthcare professionals in OT face varying degree of stress in their working environment due to various factors.
- The healthcare professionals might have used different types of coping mechanisms to deal with their stress in their working environment.

In order to achieve the objectives of the study, a four-point Likert scale with self-explanatory statements developed by ICMR was used to collect the data which included 32 questions regardingwork stress. The study was conducted among 80 healthcare professionals of OT. Prior to the study, permission was obtained from the concerned authority. Convenient sampling technique was used to select the samples.

Findings of the study summarized as follows:

- **1.** Findings related to description of demographic characteristics of sample
- In the Age group 20-30yrs, 38.9% had Mild Stress (32-64) and 61.1% had Moderate Stress (65-95) respectively.
- Age group 31-40yrs 48.6% had Mild Stress (32-64), 48.6% had Moderate Stress (65-95)and 2.7% had Severe Stress (96-128) respectively.
- Age group 41-50yrs had 61.9% Mild Stress (32-64), and 31.8% had Moderate Stress (65-95) respectively.
- Above age of 50 years 50 % had mild stress and 50 % had moderate stress. There was no significant association of the levels of stress and the age with a p value < 0.5.

2. Findings related to gender comparison

- In the males 50.7% had Mild Stress (32-64), 47.8% had Moderate Stress (65-95) and 1.5% had Severe Stress (96-128) respectively.
- In the females 46.2% had Mild Stress (32-64), 53.8% had Moderate Stress (65-95) and none had Severe Stress (96-128) respectively.
- There was no significant association of the levels of stress and the age with a p value < 0.5.

3. Findings related to marital status correlation



- Married individuals 50.0% had Mild Stress (32-64), 48.5 % had Moderate Stress (65-95) and 1. 5% had Severe Stress (96-128) respectively.
- Single individuals 50.0% had Mild Stress (32-64) and 50.0 % had Moderate Stress (65-95) respectively.
- There was no significant association of the levels of stress and the age with a p value < 0.5.

4. Findings related to education correlation

- Among the diploma holders 57.1% had Mild Stress (32-64), 42.9% had Moderate Stress(65-95) respectively.
- Among the 36.4% graduates 36.4% had Mild Stress (32-64), and 63.6% had ModerateStress (65-95) respectively.
- Among the Post graduates 60.6% had Mild Stress (32-64), 36.4% had Moderate Stress (65-95) and 3% had Severe Stress (96-128) respectively.
- There was no significant association of the levels of stress and the age with a p value < 0.5.

5. Findings related to work experience correlation

- Among those who had a work experience of less than 10years 43.2% had Mild Stress (32-64), 56.8% had Moderate Stress (65-95) respectively.
- Among those who had a work experience between 10 and 20 years 60.0% had Mild Stress (32-64), 36.7% had Moderate Stress (65-95) and 3.3% had Severe Stress (96-128) respectively.
- Among those who had a work experience of more than 20 years 46.2% had Mild Stress (32-64), 53.8% had Moderate Stress (65-95) respectively.
- There was no significant association of the levels of stress and the age with a p value < 0.5.

6. Findings related to profession correlation

- Among those who were Surgeons 63.2% had Mild Stress (32-64), 36.8% had ModerateStress (65-95) respectively.
- Among the Anesthetists 83.3% had Mild Stress (32-64), and 16.7% had Moderate Stress(65-95) respectively.
- Among the OT matrons had 20% Mild Stress (32-64), and 80.0 had Moderate Stress (65-95) respectively.
- Among the Resident had 38.9% Mild Stress

(32-64), 55.6% had Moderate Stress (65-95) and 5.6% had Severe Stress (96-128) respectively.

- Among the ORA 46.9% had Mild Stress (32-64) and 53.1% had Moderate Stress (65-95)
- There was no significant association of the levels of stress and the age with a p value < 0.5.

IMPLICATIONS

The implications of this study to assess the stress levels among healthcare professionals in the operating room is significant and can influence various aspects of healthcare delivery, workplace policies, and employee well-being:

- 1. Improved Workplace Policies: The study findings can lead to the development and implementation of tailored workplace policies and procedures aimed at reducing stress among healthcare professionals. This might include revising shift schedules, providing adequate breaks, and optimizing work processes to minimize stressors.
- 2. Enhanced Training: The insights gained from the study can inculcate training programs for healthcare workers, equipping them with stress management skills and strategies to handle high- pressure situations effectively.
- 3. Teamwork and Communication: Understanding the specific stressors in the operating room can promote teamwork and open communication among healthcare professionals. Improved collaboration can lead to more efficient and less stressful work environments.
- 4. **Mental Health Support**: Recognizing the stress levels within the operating room can prompt healthcare organizations to offer mental health support services to their staff. This might include access to counselling, stress reduction programs, or resources for managing psychological well-being.
- 5. **Patient Safety**: Stress levels among healthcare professionals can impact patient safety. Addressing stress can contribute to better decision-making and reduced risk of errors during surgeries and medical procedures.
- 6. **Recruitment and Retention**: Healthcare workers who perceive their workplace as supportive in managing stress are more likely to be satisfied and remain in their positions. This can reduce turnover rates and improve recruitment efforts.
- 7. Cost Savings: Lower stress levels can lead to



reduced absenteeism, medical leave, and burnoutamong healthcare professionals, which can result in cost savings for healthcare institutions.

- 8. **Research and Continuous Improvement**: The study can serve as a foundation for ongoing research into stress management strategies and their effectiveness. This allows for continuous improvement in addressing stressors in the operating room.
- 9. **Patient Experience**: Healthcare professionals under less stress are likely to provide better patient care, which can enhance the overall patient experience and outcomes.
- 10. Legal and Ethical Considerations: Understanding stress levels may have legal and ethical implications, particularly in cases where stress affects the quality of patient care. It can prompt discussions on liability and duty of care.

In summary, a study assessing stress levels among healthcare professionals in the operating room can have far-reaching implications for healthcare organizations, professionals, and patients. By addressing stressors and promoting well-being of health care professionals, it contributes to a healthier work environment and better patient care.

LIMITATIONS

The study was limited to only 80 OT health care professionals who were available at the time ofdata collection

RECOMMENDATIONS

On the basis of findings of this study following recommendations have been made for further study.

- The study can be replicated on large samples
- A study can be conducted to evaluate effectiveness of various relaxation techniques inreducing stress
- A comparative study can be done to assess the stress of various other group of workers in the hospital.

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