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Perceived Stress Among Doctors of a Tertiary Care Hospital: A Cross-sectional Study

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Dr. Parth Dharmesh Shah[1], Dr. Vaishal Dushyant Chokshi[2], Dr. Aalapi B Prajapati[3], Dr.Aatman N Parikh[4]

1Senior Resident , Department of Psychiatry , Narendra Modi Medical College and Sheth LG General Hospital , Ahmedabad .
2Assistant Professor, Department of Psychiatry, Narendra Modi Medical College and Sheth LG General Hospital, Ahmedabad.
3Assistant Professor, Department of Psychiatry, GCS MedicalCollege, Hospital and Research Centre, Ahmedabad.
4Senior Resident, Department of Psychiatry , B.J.Medical College and Civil Hospital , Ahmedabad .

Corresonding Author: Dr. Vaishal Dushyant Chokshi

Keywords
Stress, doctors, workload

Abstract
INTRODUCITON :
There have been increasing reports of stress and stress related disorders such as anxiety and depression among medical students and medical professionals. Stress is a big part of doctors' occupation and the most important reason for the same being the fact that it involves people and their lives. This study aims to find out more about the factors that may pre-dispose doctors towards increasing stress.
AIMS:
To assess perceived stress among resident doctors and faculty doctors of a tertiary care hospital by applying appropriate measures.
To find correlation between perceived stress and socio-demographic variables.
To assess a correlation between duration of working hours and perceived stress
RESULTS:
A statistically significant correlation between perceived stress score and age as well as designation of participants was obtained
CONCLUSION:
Stress management and work management skills should be incorporated into the medical profession while mitigating the stigma associated with seeking professional help for mental health issues. At the institute level, regular screening of doctors for burnout and other psychological issues should be done and workshops to manage stress, burnout and depression should be conducted on a regular basis.

1. Introduction

There have been increasing reports of stress and stress related disorders such as anxiety and depression among medical students and medical professionals . Stress is a big part of doctors' occupation and the most important reason for the same being the fact that it involves people and their lives. This study aims to find out more about the factors that may pre-dispose doctors towards increasing stress . The study of Firth-Cozens shows that doctors (28%) have higher level of stress as compared to the general population (18%) [1].The quality of life of these healthcare workers is severely affected by the work stress such that they lead and can lead to physical and psychological issues over a long period of time. Stress is a risk factor for several chronic diseases including

hypertension, diabetes, and heart diseases. Stress also precipitates various mental health issues such as depression, anxiety, substance use, etc. The deteriorating personal life of doctors also affects them professionally as it decreases the quality of patient care and they have to bear the consequences [2]. The first case of outbreak of acute pneumonia caused by the new/novel coronavirus , officially named COVID-19, was declared by World Health Organization on 31st December , 2019 . More than 251 million cases of COVID- 19 and more than 50 million casualties associated with the same have been reported as of

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November 2021 . Isolation, quarantines, lockdowns, loss of work, work from home, etc. have brought about various psychological issues among the general public . Frontline healthcare workers were also affected during this pandemic . Isolation, expanded workloads, life-threatening workplaces, concern about infecting relatives or colleagues, and some other personal factors have lead to burnout of medical staff [3] . Healthcare workers exposed to COVID-19suffered from serious psychological disturbances, the most common of which were depression, anxiety, insomnia, and fear as per several surveys [4].

2. Aims and Objectives

1) To assess perceived stress among resident doctors and faculty doctors of a tertiary care hospital by applying appropriate measures .
2) To find correlation between perceived stress and socio-demographic variables .
3) To assess a correlation between duration of working hours and perceived stress

METHODOLOGY

1. Study Type:

Cross sectional comparative study was undertaken.

2. Study Site:

The study was conducted in Department of Psychaitry, GCS Medical College, Hospital and Research Center, Ahmedabad; a tertiary healthcare center.

3. Study Period:

The study was conducted during the period of 2019-2021.

4. Study Population

Resident doctors and the teaching medical specialists/faculty doctors ofvarious clinical and non-clinical departments of the tertiary healthcare center.

4.1 Sample Size:

A total of 43 doctors participated in the study.

- 07 Senior residents
- 36 Specialist doctors/faculty doctors

Selection Criteria for participants

Inclusion criteria:

- Resident doctors and senior faculty doctors of all the departments of the hospital who are willing to participate by giving a written informed consent.

Age between 18 to 70 years

Exclusion Criteria:

Those who were not willing to participate in the study or did notwish to give consent for the study

Those who were previously treated with psychotropics or are currently on any psychotropics (having a pre-existing psychiatricillness) .

5. Cohen's Perceived Stress Scale (PSS):

Sheldon Cohen and his colleagues developed the scale in 1983.

It is a self-administered questionnaire.

Two versions of the scale: 14-item and 10-item, the latter one is used more often. There is a 4-item form as well for quick measurements, however, it has lower reliability.

The 10-item questionnaire is used in this study.

Each item is scored from "never" to "very often"-from 0to 4, the maximum score thus being 40.

Before scoring, scores of positively phrased questions 4, 5,7 and 8 are reversed.

Scores from 0-13 indicate low stress, 14-26 indicate moderate stress and 27-40 indicate high stress .

Statistical Analysis:

- Data was entered into the Microsoft Excel and master-chart was prepared.
- Statistical Package for Social Sciences (SPSS) version 16.0 was used for statistical analysis.

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- The Chi square statistical test with Yates correction was applied andp values were obtained.
- Level of significance in the study was kept at 5% ($p < 0.05$).

6. Ethical considerations:

- Approval for the study was initially obtained from the Institutional Ethics Committee (IEC) of the tertiary care hospital.
- Each medical professional was recruited for the study only after they gave an informed concsent , which was written .

Confidentiality of the participating medical professionals was maintained throughout the study

3. Results:

Table 1: SOCI-DEMOGRAPHIC DETAILS OF PARTICIPANTS

VARIABLES		1ST YEAR RESIDENT n (%)	2ND YEAR RESIDENTn (%)	3RD YEAR RESIDENT n (%)	SENIOR RESIDENT n (%)	FACULTY DOCTORS n (%)	TOTAL (n=117)
AGE	20-29 YEARS	29 (24.78)	28 (23.93)	31(26.49)	06 (5.12)	00	94 (80.34%)
	30-39 YEARS	01 (0.85)	03 (2.56)	00	01 (0.85)	07 (5.98)	12 (10.25%)
	40-49 YEARS	00	00	00	00	07 (5.98)	07 (5.98%)
	50-59 YEARS	00	00	00	00	02 (1.70)	02 (1.70%)
	>=60 YEARS	00	00	00	00	02 (1.70)	02 (1.70%)
GENDER	MALE	14 (11.96)	12 (10.25)	16 (13.67)	02 (1.70)	09 (7.69)	53 (45.29%)
	FEMALE	16 (13.67)	19 (16.23)	15 (12.82)	05 (4.27)	09 (7.69)	64 (54.70%)
MARITAL	MARRIED	03 (2.56)	07 (5.98)	04 (3.41)	03 (2.56)	16 (13.67)	33 (28.20%)

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STATUS	UNMARRIED	27 (23.07)	24 (20.51)	27 (23.07)	04 (3.41)	02 (1.70)	84 (71.79%)

Table 2: SUBSTANCE USE AND WORKING HOURS AMONG PARTICIPANTS

VARIABLES		1st YEAR RESIDENTS n (%)	2nd YEAR RESIDENTS n (%)	3rd YEAR RESIDENTS n (%)	SENIOR RESIDENTS n (%)	FACULTY DOCTORS n (%)	TOTAL =117n (%)
SUBSTANC E USE	YES	09 (7.69)	03 (2.56)	06 (5.12)	01 (0.85)	03 (2.56)	22 (18.8)
	NO	21 (17.94)	28 (23.93)	25(21.36)	06 (5.12)	15 (12.82)	95 (81.1)
WORKING HOURS (hours/week)	<30	00	00	00	01 (0.85)	00	01 (0.85)
	30-39	00	02 (1.70)	00	00	03 (2.56)	05 (4.27)
	40-49	00	03 (2.56)	11 (9.40)	02 (1.70)	04 (3.41)	20 (17.09)
	50-59	03 (2.56)	06 (5.12)	04 (3.41)	01 (0.85)	07 (5.98)	21 (17.94)
	>=60	27 (23.07)	20 (17.09)	16 (13.67)	03 (2.56)	04 (3.41)	70 (59.82)

Table 3: CORRELATION BETWEEN STRESS SCORESAND SOCIO_DEMOGRAPHIC VARAIBLES :

	PERCEIVED STRESS SCORES				
AGE	LOW	MODERATE	HIGH	TOTAL	
<30 years	16	57	21	94	**$\chi 2$=5.069p=0.04**
>=30 years	07	08	08	23	
TOTAL	23	65	29	117	
GENDER	LOW	MODERATE	HIGH	TOTAL	$\chi 2$=4.911 p=0.085
MALE	15	25	13	53	
FEMALE	08	40	16	64	
TOTAL	23	65	29	117	
MARITAL	LOW	MODERATE	HIGH	TOTAL	$\chi 2$=1.034p=0.59

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STATUS					
MARRIED	07	16	10	33	
UNMARRIED	16	49	19	84	
TOTAL	23	65	29	117	
WORKING HOURS/WEEK	LOW	MODERATE	HIGH	TOTAL	
<60 hours/week	12	26	09	47	$\chi 2=2.38 p=0.303$
>=60 hours/week	11	39	20	70	
TOTAL	23	65	29	117	

A statistically significant correlation between perceived stress score and age of participants was obtained .

Table 4: PERCEIVED STRESS SCORE AND ITS CORRELATION TO DESIGNATION :

	PERCEIVED STRESS SCORE				
DESIGNATION	LOW	MODERATE	HIGH	TOTAL	
FIRST YEAR RESIDENTS	03	16	11	30	
SECOND YEAR RESIDENTS	01	23	07	31	$\chi 2=6.374$
THIRD YEAR RESIDENTS	06	20	07	31	**p=0.041**
SENIOR RESIDENTS	01	04	02	07	
FACULTY DOCTORS	06	06	06	18	
TOTAL	23	65	29	117	

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A statistically significant correlation between perceived stress score and designation of participants was obtained .

4. Conclusion:

Stress management and work management skills should be incorporated into the medical profession while mitigating the stigma associated with seeking professional help for mental health issues. At the institute level, regular screening of doctors for burnout and other psychological issues should be done and workshops to manage stress, burnout and depression should be conducted on a regular basis.

References:

[1] Cozens F. Doctors, their wellbeing, and their stress. BMJ. 2003;326–670.

[2] Anjum A, Anjum A, Anjum U, Ming X. An empirical study exploring the determinants of stress among medical healthcare professionals. Afri HealthSci.2019;19(4):3091-3099.

[3] Lai J, Ma S, Wang Y, et al. Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. JAMA Netw Open. 2020;3(3):e203976.

[4] Huo L, Zhou Y, Li S, Ning Y, Zeng L, Liu Z, Qian W, Yang J, Zhou X, Liu T, Zhang XY. Burnout and Its Relationship With Depressive Symptoms in Medical Staff During the COVID-19 Epidemic in China. Frontiers in psychology. 2021 Mar 4;12:544.