

Emotional Exhaustion among Doctors in a Tertiary care Hospital: A Cross-sectional Study.

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Abstract

Introduction:

The practice of medicine is one of the most distinctive and demanding profession in the world. It is incredibly meaningful and fulfilling on a personal and professional basis, but is also associated with a higher degree of emotional and physical exhaustion. This study aims to find out an association between occupational exhaustion and various factors that may affect the same.

Aims and Objectives:

To assess emotional exhaustion among resident doctors and faculty doctors of a tertiary care hospital by applying appropriate measures.

To find correlation between emotional exhaustion and socio-demographic variables.

To assess a correlation between duration of working hours and emotional exhaustion.

Results:

A statistically significant correlation was obtained between occupational exhaustion and their age, working hours as well as designation within the healthcare system.

Conclusion:

Many a times the mental health of health-care providers themselves may be at risk, and it is of utmost importance to identify and help them cope with their mental health issues, owing to exhaustion .

1. Introduction

The practice of medicine is one of the most distinctive and demanding profession in the world. It is incredibly meaningful, satisfactory and fulfilling on a personal and professional basis, but is also associated with a significant amount of physical and emotional exhaustion.

Various studies across the globe have suggested that health-care workers , including resident doctors , faculties maybe at a higher risk to develop depression , anxiety , substance use and other mental health problems [1,2].

Burnout can be divided into three parts: emotional exhaustion, depersonalisation and personal accomplishment. Emotional exhaustion is the individual stress dimension of burnout. It bears

reference to both emotional and physical fatigue over an extended period. Depersonalisation can be considered as the interpersonal dimension of burnout. It consists of harboring negative feelings and detachment from the job. Poor personal accomplishment refers to how an individual evaluates self in terms of his/her work, referring to feelings of incompetence and a lack of achievement at work . The first two dimensions arise from the presence of workload exhaustion and social conflict, the latter arises from a lack of resources [3].

Individual and organizational (interpersonal and institutional) factors associated with burnout include: work-related stress and anxiety; work-life balance ; prolonged working hours; increased workloads ; poor working conditions; public system- related frustrations; insufficient holiday time; inadequate equipment ; poor support from management and decreased work satisfaction [4].

Journal of Coastal Life Medicine

AIMS:

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

2. Methodology:

1. Study Type:

Cross-sectional comparative study was undertaken .

2. Study Site:

The study was conducted in Department of Psychiatry , 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 of various clinical and non-clinical departments of our 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 from 18 to 70 years
- ##### Exclusion Criteria:
- Those who were not willing to participate in the study or did not wish to give consent for the study

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

Scales used:

i) Maslach Burnout Inventory (MBI)

- It is a self-administered scale developed by Maslach and colleagues in 1981.
- Used to measure burnout among professionals.
- It is used to measure three parts of burnout: emotional exhaustion, depersonalization and personal accomplishment.
- Contains 22 items in total
 - 9 for emotional exhaustion
 - 5 for depersonalization
 - 8 for personal accomplishment
- All items are scored using 7 level frequency ratings from “never” to “daily” – from 0 to 6. All three dimensions are scored separately.

Statistical Analysis:

- Data was entered into the Microsoft Excel software and master-chart was prepared.
- Analysis has been done using Statistical Package for Social Sciences (SPSS) version 16.0.
- The Chi square statistical test with Yates correction was applied and p values were obtained.
- Level of significance in the study was kept at 5% ($p < 0.05$).

5. Ethical considerations:

- Approval for the study was initially obtained from the Institutional Ethics Committee (IEC) of the tertiary care hospital.
- Written informed consent was obtained from each medical professional.
- Confidentiality of the participating medical

Journal of Coastal Life Medicine

professionals was maintained throughout the study.

3. Results:

TABLE 1 : Socio-demographic details of participants

VARIABLES		1 ST YEAR RESIDENT n (%)	2 ND YEAR RESIDENT n (%)	3 RD 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 STATUS	MARRIED	03 (2.56)	07 (5.98)	04 (3.41)	03 (2.56)	16 (13.67)	33 (28.20%)
	UNMARRIED	27 (23.07)	24 (20.51)	27 (23.07)	04 (3.41)	02 (1.70)	84 (71.79%)

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TABLE 2 : Substance use and working hours among participants

VARIABLES		1 st YEAR RESIDENTS	2 nd YEAR RESIDENTS	3 rd YEAR RESIDENTS	SENIOR RESIDENTS	FACULTY DOCTORS	TOTAL
		n (%)	n (%)	n (%)	n (%)	n (%)	=117n (%)
SUBSTANCE 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 : OCCUPATIONAL EXHAUSTION AND ITS CORRELATION TO SOCIODEMOGRAPHIC VARIABLES AND WORKING HOURS

		OCCUPATIONAL EXHAUSTION			$\chi^2=2.803$ p=0.246	
GENDER		LOW	MODERATE	HIGH		TOTAL
MALE		22	13	18		53
FEMALE		21	25	18		64
TOTAL		43	38	36	117	
AGE				L	$\chi^2=6.374$ p=0.041	
<30 years	30	35		29		94
>=30 years	13	3		7		23
TOTAL	43	38		36		117
MARITAL STATUS					$\chi^2=4.71$ p=0.094	
MARRIED	16	6		11		33
UNMARRIED	27	32		25		84
TOTAL	43	38		36		117

Journal of Coastal Life Medicine

WORKING HOURS/WEEK					$\chi^2=21.166$ p=0.00002
<60 hours/week	29	10	8	47	
>=60 hours/week	14	28	28	70	
TOTAL	43	38	36	117	

A statistically significant correlation was obtained between occupational exhaustion and age of participants, as well as their working hours.

TABLE 4: DESIGNATION AND ITS CORRELATION TO OCCUPATIONAL EXHAUSTION IN THE PARTICIPANTS

DESIGNATION	OCCUPATIONAL EXHAUSTION				
	LOW	MODERATE	HIGH	TOTAL	
FIRST YEAR RESIDENTS	04	15	11	30	$\chi^2= 21.5$ p=0.0059 (significant)
SECOND YEAR RESIDENTS	11	07	13	31	
THIRD YEAR RESIDENTS	13	13	05	31	
SENIOR RESIDENTS	04	02	01	07	
FACULTY DOCTORS	11	01	06	18	
TOTAL	43	38	36	117	

A statistically significant correlation was obtained between occupational exhaustion and designation of participants.

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4. Conclusion :

This study demonstrates that a significant number of doctors experience burnout, stress and depression in the Indian setting. Long working hours, female gender and junior residency in a clinical stream are strongly associated with the presence of burnout, stress and depression. There is a pressing need to address these issues and develop strategies to tackle them .

References

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