

Original article

To explore burnout level among healthcare professionals working in different scenario in hospitals

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Abstract

Background: Burnout is more common in healthcare professionals especially who are involving in direct care. We conducted this study in Tertiary care teaching Hospital and Medical College including our hospital intensive care unit (ICU), OT, ER, ward, Lab in India to explore the burnout among healthcare professionals working in various department.

Aim: To assess the level of burnout in healthcare professionals working in tertiary care teaching hospital.

Materials and Methods: A cross-sectional hospital based questionnaire survey comprises of two traits to measure burnout. trait 1comprises of the population information. trait 2comprises of Maslach Human Services Survey Burnout Inventory.

Results: The study include 200 healthcare professionals, in which68.7% have Low level of burnout, 15% have moderate level of burnout and 16.3% shown high level of burnout .

Conclusion: Among the healthcare professionals, staff nurses those who are working in ward possess high level of burnout.

Keywords:Intensive Care Unit(ICU), Operation Theatre(OT), Emergency Room(ER), Maslach Burnout Inventory(MBI), Emotional Exhaustion(EE), DePersonalisation(DP), Personal Accomplishment(PA).

Introduction

Burnout is hidden mostly as providers are too busy in caring their patients, diagnosing and saving the lives, they neglect their own life sometimes. Moreover, the symptoms are not easily identifiable and detectable. "Most people in the healthcare professions carry their jobs home with them," said by Sandy Ewing, the expert in burnout prevention. "It's good to really care about your patients. But if you don't know how to distance yourself at times, it will be a problem." To retain the nurses in workplace is a challenge nowadays, because of deficit of material goods, uncooperativeness and lacking in support in organization. Research studies shows that mobility of nurses from organizations

negatively influences the growth and benefits of organizations

Background

Burnout is defined as "an experience of physical, emotional, and mental exhaustion, caused by long-term involvement in situations that are emotionally demanding^[1]". It is also defined as "burnout is the index of dislocation between what people are and what they have to do. It represents an erosion in values, dignity, spirit, and will and erosion of the human soul^[2]". It shows the symptoms such as depersonalization, low fecundity, and feelings of low accomplishment. Burnout have two illusive adverse components: The first one is dreary, dull, tiring, annoying, fatiguing job.The second one is overwhelmed by the sheer volume of work over

years struggling to keep up with demand to adapt changes. Burnout occurrence can be in any industry or occupation^[3]. Although, it occurs in any industry or occupation it is more often seen in the professionals involving in direct care such as physicians, nurses, social workers, counselor and teacher. It is generally correlated with the long term and harmful effect resulting from overly emotional and the situations and pressures that cause stress from the people they met daily. The incidence is more among healthcare workers of about 25%^[4]. Employee in healthcare perceive work related stress as a result of incompetence, organizational factors, lack of companionship and intimacy resulting in strain, disability management, psychiatric disorders which shows physical symptoms leading to gradual decline in quality of life and the service rendered to the people^[5]. People with burnout may be prone to get problems with their eating habits such as excessive eating, emotional eating, and having inability to change their eating habits leading to obesity^[6] and also, people with burnout has prone to get cardiovascular diseases and cerebro-vascular diseases. It is due to decrease in fibrinolytic capacity to adapt with stress^[7]. Group of clinical symptoms occur in burnout and it is also a forecaster for the development of distress, truancy, and backsliding in job competency^[8]. Most of the job relevant parables is correlated with increased levels of emotional unhealthiness are possibly manageable to reverse things^[9]. Organizations should make arrangements to intervene the burnout programmes accessible to the staff members^[10]. Burnout takes a quiet longer time to progress, but it is unfamiliar with the traditional experienced workers^[11-13]. Reestablishments, restructuring, and contracting the healthcare organizations is a general aggravating advent leading to a high

degree of distress, apprehension and impulsive weariness^[14,15].

Emotional depression among the employees working in healthcare lead to descent in health and work competency^[16].Eventhough organizational and situational factors were used to asses burnout, the employee working in the same working area may or may not have burnout. It shows that burnout is manifold, ambidextrous, supernatural event^[17].Many studies have been conducted in the past to explore burnout among direct care professionals, we step forward in India to assess the unidentified factors in relation with burnout and tried to document the burnout level among the direct care professionals and the associated variables influencing burnout employed in tertiary care medical college and hospital. This study helps to develop an effective strategies and interventions to the hospitals in preventing stress reduction to the employee.

Methods

A cross-sectional Maslach Burnout Inventory (Human Services Survey) was conducted in Tertiary care Hospital and Medical College in India from February 1 till March 31, 2015. An incidental sample of 200 healthcare professionals from hospital was chosen, to forecast all nurses, OT technicians, Lab technicians and physiotherapists working in our hospital.

The inclusive criterion were 1) Older than 18 years of age; 2) able to speak, read and write English; and 3) Employee working in Tertiary care Medical College and Hospitals.

In this study, burnout was assessed using a questionnaire survey comprises of 22 questions.

It is categorized in 3 subscales: emotional exhaustion, depersonalization and personal accomplishment.Each questions to be answered on a 6 point likert scale scoring from never to everyday. The scoring key was rearranged

according to the subscale. Scores were categorized according to the subscale EE, DP and PA after adding the scores in the “how often” column and entered the total. The EE scale contains 9 items. Frequency score of EE of 27 or over is considered high level of EE, whereas 17-26 is considered moderate and 0-16 is considered low level of EE. The DP scale contains 5 items. Frequency score of DP of 13 or over is considered high level of DP, whereas 7-12 is considered moderate and 0-6 is considered low level of DP. The PA scale contains 8 items. Frequency score of PA of 39 or over is considered high level of PA, whereas 32-38 is considered moderate and 0-31 is considered low level of PA.

Sample

An incidental sample of 200 healthcare professionals was selected from Tertiary care Hospital and Medical College. Completed surveys were returned from participants, a response rate of 96%. The study was conducted from 1st February till 31st March, 2015 at Tertiary care Medical College and Teaching Hospitals in India. The distribution of the study sample was 128 staff nurses, 10 specialist nurses, 8 charge nurses, 7 nursing supervisors, 15 OT technicians, 7 physiotherapists, 25 Lab technicians. Details of participants who were not willing to participate are not available.

Data collection

Respondents completed a 2-part survey that included a demographic questionnaire and Maslach Burnout Inventory questionnaire. The demographic questionnaire measured variables that included age, sex, marital status, level of education, years of experience, service area, job position, overtime performed, and overtime payment. Burnout was assessed using a questionnaire survey comprises of 22 questions. It is categorized in 3 subscales: emotional exhaustion, depersonalization and

personal accomplishment. Each questions to be answered on a 6 point likert scale scoring from never to everyday. Ethical permission to conduct the study was obtained from hospital authorities prior to data collection. An ethical consent was obtained from those who are willing to complete the questionnaire. Surveys were distributed to the healthcare professionals while they were on the job. The entered questionnaires are then collected after ensuring that all questions were answered. Data were entered for analysis after rearranged according to subscales.

Data analysis

The completed questionnaires were scored using the scoring key developed by Maslach and Jackson (1981). The final scores consisted of three sub-scores: Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA). Higher scores of EE, DP and a lower score of PA indicate a higher level of burnout. Lower scores of EE, DP and a higher score of PA indicate a lower level of burnout. Average scores of EE, DP, and PA indicate moderate level of burnout.

Demographic data including gender, age, level of education and marital status, as well as work situations such as job position, Service area, Years of experience overtime payment and overtime performed, were recorded as numbers and percentages were found out. Frequencies for all variables were found out. Chi square analysis was performed to analyze the relationships among the variables and subscales. The t test is used to find out the means and Standard deviation. One-way analysis of variance was used for the analysis of burnout according to the socio demographic information, profession, work conditions and level of job strain. All calculations were performed using a software SPSS V.19, with the level of significance set at $p < 0.05$.

Results

Characteristics of the participants:

The majority of the participants were female dominant young professionals around the age group of 20-24. Majority of the participants were single and have less years of experience in their respective field. Most of the participants were performing overtime duties without payment from the organization. The socio-demographic variables and its sub-categories were categorized in (Table 1)

The Majority of the participants were female dominated young professionals around the age group of 20-24. Majority of the participants were single and have less than a year of experience in their respective field. Most of the participants were performing overtime without payment from Organization. The socio-demographic variable and its subscales were categorized in (Table I). Demographic data including gender, age, Level of education, marital status as well as work situation (Such as Job position, overtime payment and overtime performed) were recorded as numbers and percentage.

(Table 2) shows that, among the health professional, majority of the participants were staff nurses (64%), 12.65% were Lab technicians, 7.5% were OT Technicians. 5% Specialist nurse, 3.85% were Charge nurse, 3.5% were Nursing supervisors and Physiotherapist. Demographic data including gender, age, Level of education, marital status, Job position, overtime payment and overtime performed were recorded as numbers and percentages, frequencies of all variable were found out. Chi square analysis was performed to analyze the relationship among the variables. All calculations were performed using a software SPSS (Vr.19) with the level of significance set at $P < 0.05$.

(Table 3) shows the comparison between service area with variables. Among the healthcare

professionals, 8.5% of staff nurses working in ER, 32% of staff nurses were working in Ward, 5.5% staff nurses were working in OT, 17.5% staff nurses were working in ICU. 0.5% special nurse were working in ER, 4% special nurse were working in Ward, 0.5% special nurse were working in OT. Among the charge nurses, 2% were working in Ward, 0.5% were in OT, 1.5% were working in ICU. Among the nursing supervisor, 0.5% were working in ER, 2% in ward, and 1% in ICU. Among the OT technician 0.5% were working in ward, and 5.5% were in OT. Results revealed that majority of the healthcare professionals were female and single, around the age group of 20-24 years holding their diploma as educational qualification. They are doing their overtime voluntarily and they don't get payment in return. Except in OT, it is dominated by married personnel and ICU is dominated by the degree holders. In all the departments, fresher's dominated in their service area in numbers.

At the next stage of analysis, the level of burnout is assessed with three dimensional factors such as emotional exhaustion, Personal accomplishment, and Depersonalization. From (Table 4) shows that there is a significant effect on EE with age ($p=0.05$), Marital status ($p < 0.001$), Level of education ($p < 0.001$), Years of experience ($p < 0.001$), Job position ($p=0.01$), Overtime performed ($p=0.05$). There is a significant effect on PA with age ($p=0.01$), Marital status ($p=0.009$), Service area ($p=0.01$), Job position ($p=0.03$), Overtime payment ($p < 0.001$). There is a significant effect on DP with age ($p=0.006$), Marital status ($p < 0.001$), Job position ($p=0.01$), Overtime performed ($p=0.01$), Overtime payment ($p=0.006$)

Frequency of scores for EE, DP, and PA were found out. The results from the (Table 5) shows that EE subscale revealed 62% were scored low, 18% were scored moderate and 20% were

scored high. DP subscale revealed 78.5% were scored low, 16% were scored moderate and 5.5% were scored high. PA subscale revealed 23.5% were scored low, 11% were scored moderate and 65.5% were scored high. It is represented in (figure 1).

(Table 6) revealed that among the healthcare professionals, 68.7% have Low level of burnout, 15% have moderate level of burnout and 16.3% shown high level of burnout.

(Table 7) shows that among the healthcare professionals, the level of burnout was compared and found that, staff nurses have 46% low burnout, 85% moderate burnout, and 9% high burnout. Specialist nurse revealed that they have 4% low burnout, 1% moderate burnout and 0.5% high burnout. Charge nurse experienced 3% low burnout, and 0.5% have moderate and high level of burnout. Nurse supervisors revealed that 2% have low burnout, 1% moderate burnout and 0.5% have high burnout. OT technician shows that they experience 4% of low burnout, 1.5% moderate and 2% have high level of burnout. Physiotherapist shown that they have 2.5% low burnout and 0.5% of moderate and high level of burnout. Lab technician revealed that they experience 7% low burnout, 2.5% moderate burnout and 3% high level of burnout. It is represented in (figure 2).

The results from the (Table 8) shows that the assessment of burnout level of healthcare professionals working in different service area. HCP working in ER shows 7.5% low, 1.5% moderate and 1% high level of burnout. HCP working in Ward shows 29.5% low, 5% moderate and 6% high level of burnout. HCP working in OT shows 7.5% low, 2% moderate and 2.5% high level of burnout. HCP working in ICU shows 14.5% low, 4% moderate and 2.5% high level of burnout. HCP working in Lab shows 10% low, 2.5%

moderate and 4% high level of burnout. It is represented in (figure 3).

(Table 9) reveals that, among the healthcare professionals, staff nurses shown high level of burnout (9%), and next to staff nurses, lab technician(3%) shows high burnout, followed by the OT Technicians(2%), and others possess least percentage (0.5%) of high level burnout. It is represented in (figure 4).

(Table 10) shows that among the healthcare professionals, staff nurses those who are working in ward possess high level of burnout (6%). Followed by them, Lab technicians (4%), ICU nurses (2.5%), OT technicians (2.5%) possess high level of burnout. It is represented in (figure 5).

Discussion

Salient findings of the study:

In this study, female found to be more burnout compared with male. Differences in gender in relation with burnout revealed in some studies due to their job differences. Regarding gender differences, women are emotionally exhausted than men while men were depersonalized than women^[18]. Relationship between gender and burnout, a meta-analytical study shown the results that women are more expressive in revealing burnout and emotionally exhausted than men while men were more depersonalized than women^[19].

Relationship between age and years of experience, a meta-analysis revealed that negative correlation between age, years of experience and emotional exhaustion^[20]. Burnout is more common in young employees than the experienced of older than 30-40 years^[21].

The previous studies revealed that divorced employee shows more burnout than married employees^[22]. Employee who are single experienced more burnout than married personnel^[19,23,24]. Workload is considered as one of

the most identified factor influencing burnout. Perceived workload such as nurse-patient ratio, work pressure, overtime in working hours versus voluntary and pressure expected. Greek residents, experienced more depersonalized due to increased working hours^[25], Italian Dialysis technicians perceive more emotional exhaustion due to increased workload ^[26]. Voluntary and involuntary overtime workers among Dutch employees revealed that involuntary overtime workers perceive more burnout related with distress, tiring, and low job satisfaction without rewards. On the other side, voluntary overtime workers were non tiring, and satisfied with their work even without rewards, or payments. Henceforth, the negative

effects of involuntary overtime can be managed with fair rewards for their extra work^[27]. Workload and time pressure explain approximately 25% to 50% of variance of burnout especially of emotional exhaustion^[28].

Among the healthcare professionals, direct care givers shown high level of burnout and next to staff nurses, lab technician shows high burnout, followed by the OT Technicians and others possess least percentage of burnout. A study among more than 200 Japanese health care facilities showed that burnout scores were significantly higher among direct care staff members compared with first level managers, middle level managers and the staff personnel^[29].

Figure I: Frequency of scores for EE, DP and PA: Frequency of low, moderate and high level scores for emotional exhaustion, depersonalization and personal accomplishment

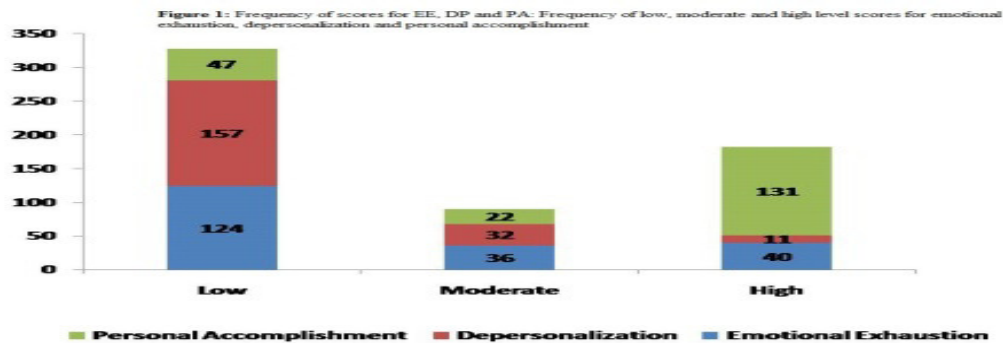


Figure II: Level of burnout in different job position: Level of burnout such as low, moderate and higher percentage of participants in job position such as staff nurse, specialist nurse, charge nurse, nurse supervisor, OT technician, physiotherapist and lab technician

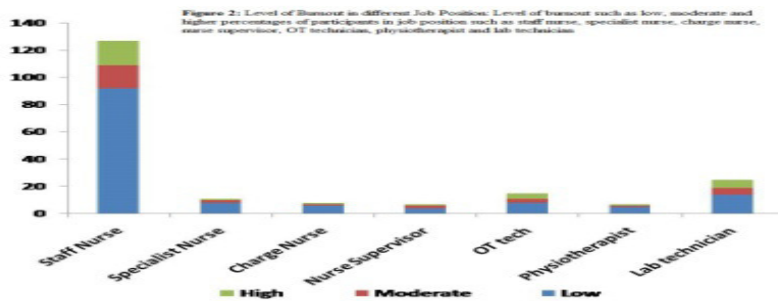


Figure III: Level of burnout in different service area: Level of burnout such as low, moderate and higher percentages of participants in service area such as casualty, ward, OT, ICU, lab and physiotherapy department

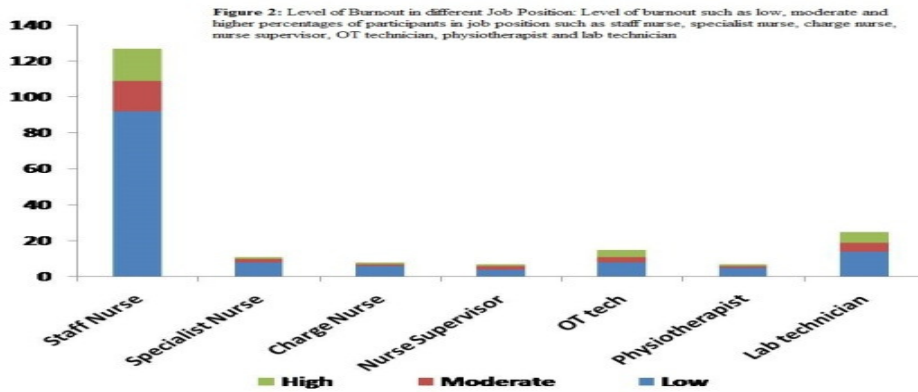


Figure IV: High burnout in different job position: Higher percentages of burnout in participants of job position such as staff nurse, specialist nurse, charge nurse, nurse supervisor, OT technician, physiotherapist and lab technician

Figure V: High burnout in different service area: Higher percentages of burnout in participants of service area such as casualty, ward, OT, ICU and others such as lab and physiotherapy department

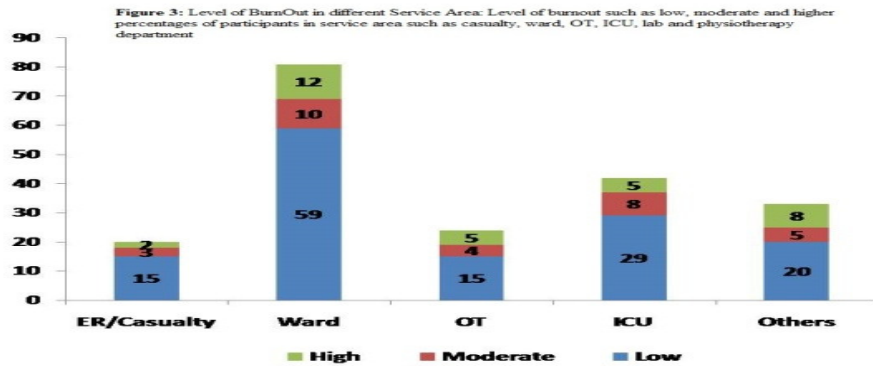


Table 1: Characteristics of participants (N=200): Finding the percentage and characteristics of participants according to the variables such as gender, age, marital status, level of education, years of experience, service area, overtime performed and overtime Payment

Factors	N	Percent
Gender		
Male	28	14.0
Female	172	86.0
Age (years)		
20-24	106	53.0
25-29	49	24.5
30-34	21	10.5
35-39	11	5.5
>39	13	6.5
Marital Status		
Married	89	34.5
Single	131	65.5
Level of Education		
Certificate	28	14.0
Diploma	107	53.5
Bachelor	54	27.0
Master's	11	5.5
Years of experience		
0-3	106	53.0
4-6	44	22
7-9	17	8.5
10-13	11	5.5
>13	22	11.0
Service Area		
ER/Casualty	19	9.5
Ward	81	40.5
OT	24	12.0
ICU (Adult & Pedi)	42	21.0
Others	34	17.0
Job Position		
Staff Nurse	128	64.0
Specialist Nurse	10	5.0
Charge Nurse	8	4.0
Nurse Supervisor	7	3.5
OT Technicians	15	7.5
Physiotherapist	7	3.5
Lab technician	25	12.5
Overtime performed		
Voluntary	128	64.0
Pressured	72	36.0
Overtime Payment		
Paid	68	34.0
Unpaid	132	66.0

Table 2: Comparison of job position with all variables: comparing the job position such as staff nurse, specialist nurse, charge nurse, nurse supervisor, OT technician, physiotherapist, lab technician, with the variables such as gender, age, marital status, level of education, years of experience, service area, overtime performed and overtime payment

Variable	Job Position														p value
	Staff Nurse		Specialist Nurse		Charge Nurse		Nurse Supervisor		OT tech		Physiotherapist		Lab technician		
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	
Gender															
Male	7	25	2	7.1	1	3.6	0	0	8	28.6	2	7.1	8	28.6	<0.001
Female	121	70.3	8	4.7	7	4.1	7	4.1	7	4.1	5	2.9	17	9.9	
Age (years)															
20-24	83	78.3	5	4.7	1	0.9	1	0.9	3	2.8	4	3.8	9	8.5	<0.001
25-29	31	63.3	2	4.1	1	2	1	2	4	8.2	3	6.1	7	14.3	
30-34	10	47.6	2	9.5	4	19	1	4.8	2	9.5	0	0	2	9.5	
35-39	3	27.3	0	0	1	9.1	1	9.1	1	9.1	0	0	5	4.5	
>39	1	7.7	1	7.7	1	7.7	3	23.1	5	38.5	0	0	2	15.4	
Marital Status															
Married	29	42	4	5.8	6	8.7	7	10.1	9	13	2	2.9	12	17.4	<0.001
Single	99	75.6	6	4.6	2	1.5	0	0	6	4.6	5	3.8	13	9.9	
Level of Education															
Certificate	15	53.6	4	14.3	2	7.1	0	0	6	21.4	0	0	1	3.6	0.001
Diploma	71	66.4	6	5.6	5	4.7	4	3.7	5	4.7	3	2.8	13	12.1	
Bachelor	40	74.1	0	0	1	1.9	2	3.7	1	1.9	3	5.6	7	13	
Master's	2	18.2	0	0	0	0	1	9.1	3	27.3	1	9.1	4	36.4	
Years of experience															
0-3	80	75.5	4	3.8	1	0.9	0	0	3	2.8	5	4.7	13	12.3	<0.001
4-6	31	70.5	3	6.8	1	2.3	0	0	3	6.8	1	2.3	5	11.4	
7-10	7	41.2	0	0	3	17.6	2	11.8	2	11.8	1	5.9	2	11.8	
10-13	6	54.5	2	18.2	0	0	1	9.1	2	18.2	0	0	0	0	
>13	4	18.2	1	4.5	3	13.6	4	18.2	5	22.7	0	0	5	22.7	
Service Area															
ER/Casualty	17	89.5	1	5.3	0	0	1	5.3	0	0	0	0	0	0	<0.001
Ward	64	79	8	9.9	4	4.9	4	4.9	1	1.2	0	0	0	0	
OT	11	45.8	1	4.2	1	4.2	0	0	11	45.8	0	0	0	0	
ICU (Adult & Pedi)	35	83.3	0	0	3	7.1	2	4.8	2	4.8	0	0	0	0	
Others	1	2.9	0	0	0	0	0	0	1	2.9	7	20.6	25	73.5	
Overtime performed															
Voluntary	76	59.4	8	6.3	7	5.5	4	3.1	8	6.3	6	4.7	19	14.8	0.231
Pressured	52	72.2	2	2.8	1	1.4	3	4.2	7	9.7	1	1.4	6	8.3	
Overtime Payment															
Paid	54	79.4	5	7.4	3	4.4	2	2.9	2	2.9	0	0	2	2.9	0.004
Unpaid	74	56.1	5	3.8	5	3.8	5	3.8	13	9.8	7	5.3	23	17.4	

Table 3: Comparison of service area with all variables: comparing the service area such as casualty, ward, OT, ICU and others such as Lab, physiotherapy department, with the variables such as gender, age, marital status, level of education, years of experience, service area, overtime performed and overtime payment

Service Area											
Variable	ER/Casualty		Ward		OT		ICU		Others		p value
	n	%	n	%	n	%	n	%	n	%	
Gender											
Male	2	10.5	3	3.7	9	37.5	4	9.5	10	29.4	<0.001
Female	17	89.5	78	96.3	15	62.5	38	90.5	24	70.6	
Age (years)											
20-24	12	63.2	54	66.7	7	29.2	19	45.2	14	41.2	0.002
25-29	5	26.3	16	19.8	5	20.8	13	31	10	29.4	
30-34	0	0	5	6.2	6	25	8	19	2	5.9	
35-39	0	0	2	2.5	2	8.3	2	4.8	5	14.7	
>39	2	10.5	4	4.9	4	16.7	0	0	3	8.8	
Marital Status											
Married	6	31.6	22	27.2	15	62.5	11	26.2	15	44.1	0.011
Single	13	68.4	59	72.8	9	37.5	31	73.8	19	55.9	
Level of Education											
Certificate	0	0	16	57.1	8	28.6	2	7.1	2	7.1	<0.001
Diploma	13	12.1	47	43.9	13	12.1	17	15.9	17	15.9	
Bachelor	6	11.1	18	33.3	0	0	20	37	10	18.5	
Master's	0	0	0	0	3	27.3	3	27.3	5	45.5	
Years of experience											
0-3	12	11.3	50	47.2	6	5.7	19	17.9	19	17.9	<0.001
4-6	5	11.4	16	36.4	4	9.1	12	27.3	7	15.9	
7-10	0	0	6	35.3	1	5.9	7	41.2	3	17.6	
11-13	0	0	2	18.2	7	63.6	2	18.2	0	0	
>13	2	9.1	7	31.8	6	27.3	2	9.1	5	22.7	
Job Position											
Staff Nurse	17	13.3	64	50	11	8.6	35	27.3	1	0.8	<0.001
Specialist Nurse	1	10	8	80	1	10	0	0	0	0	
Charge Nurse	0	0	4	50	1	12.5	3	37.5	0	0	
Nurse Supervisor	1	14.3	4	57.1	0	0	2	28.6	0	0	
OT tech	0	0	1	1.2	11	45.8	2	4.8	1	2.9	
Physiotherapist	0	0	0	0	0	0	0	0	7	100	
Lab Technician	0	0	0	0	0	0	0	0	25	100	
Overtime performed											
Voluntary	15	78.9	46	56.8	10	41.7	31	73.8	26	76.5	0.012
Pressured	4	21.1	35	43.2	14	58.3	11	26.2	8	23.5	
Overtime Payment											
Paid	9	47.4	30	37	7	29.2	19	45.2	3	8.8	0.007
Unpaid	10	52.6	51	63	17	70.8	23	54.8	31	91.2	

Table 4: Comparison of Participants on MBI-HSS: comparing the MBI variable such as emotional exhaustion, depersonalization and personal accomplishment, with the demographic variables such as gender, age, marital status, level of education, years of experience, service area, overtime performed and overtime

Variable	Emotional Exhaustion		Personal Accomplishment		Depersonalization	
	Mean±SD	p Value	Mean±SD	p Value	Mean±SD	p Value
Gender						
Male	1.57±1.345	0.071	4.43±1.709	0.094	1.00±1.361	0.006
Female	1.63±1.575		4.74±1.680		0.73±1.184	
Age (years)						
20-24	1.84±1.657	0.054	4.73±1.546	0.01	0.85±1.329	0.351
25-29	1.29±1.225		4.86±1.594		0.88±1.285	
30-34	1.29±1.271		4.43±2.293		0.52±0.750	
35-39	2.09±1.868		5.18±1.079		0.45±0.688	
>39	1.23±1.536		3.92±2.253		0.38±0.650	
Marital Status						
Married	1.51±1.587	<0.001	4.72±1.822	0.009	0.54±0.994	<0.001
Single	1.68±1.520		4.69±1.613		0.89±1.296	
Level of Education						
Certificate	1.50±0.64	<0.001	4.50±1.953	0.277	0.64±1.193	0.357
Diploma	1.43±1.585		4.52±1.793		0.81±1.375	
Bachelor	2.00±1.441		4.96±1.373		0.69±0.797	
Master's	1.91±1.375		5.64±0.505		1.09±1.300	
Years of experience						
0-3	1.91±1.636	<0.001	4.71±1.591	0.277	0.94±1.351	0.357
4-6	1.14±0.979		4.82±1.618		0.59±0.948	
7-9	1.18±1.131		4.41±2.320		0.41±0.712	
10-13	1.41±1.709		4.82±1.779		1.27±1.794	
>13	1.62±1.542		4.59±1.764		0.32±0.568	
Service Area						
ER/Casualty	0.84±1.119	0.086	4.42±2.009	0.011	0.42±0.692	0.558
Ward	1.65±1.755		5.21±1.212		0.68±1.171	
OT	1.96±1.681		3.88±2.007		1.21±1.793	
ICU (Adult & Pedi)	1.64±1.206		4.79±1.828		0.62±0.825	

Others	1.71±1.404		4.12±1.684		1.06±1.347	
Job Position						
Staff Nurse	1.54±1.536	0.013	4.83±1.698	0.03	0.66±1.231	0.015
Specialist Nurse	1.10±1.595		5.40±0.699		0.70±0.823	
Charge Nurse	1.50±1.690		5.38±0.916		0.63±0.744	
Nurse Supervisor	2.29±1.704		5.14±1.069		1.00±1.00	
OT Technicians	2.40±1.595		3.40±2.197		0.93±1.163	
Physiotherapist	1.43±1.813		4.71±1.254		1.29±2.215	
Lab technician	1.68±1.314		4.20±1.581		1.08±1.077	
Overtime performed						
Voluntary	1.40±1.312	0.051	4.77±1.623	0.33	0.70±1.053	0.001
Pressured	2.01±1.827		4.57±1.791		0.89±1.449	
Overtime Payment						
Paid	1.79±1.671	0.604	4.59±1.887	<0.001	0.79±0.68	0.006
Unpaid	1.53±1.469		4.67±1.573		0.76±1.166	

Table 5: Frequency of scores for EE, DP and PA: Frequency of low, moderate and high level scores for emotional exhaustion, depersonalization and personal accomplishment

Frequency of scores for EE, DP and PA						
High	Low		Moderate			
	N	%	N	%	N	%
Emotional Exhaustion	124	(62%)	36	(18%)	40	(20%)
Depersonalization (5.5%)	157 (78.5%)		32 (16%)		11	
Personal Accomplishment (65.5%)	47 (23.5%)		22 (11%)		131	

Table 6: levels of burnout of participants: Overall burnout levels such as low, moderate and high level percentage for the participants

Burnout level	N	%
Low	138	68.7
Moderate	30	15
High	32	16.3

Table 7: Level of Burnout in different Job Position: Level of burnout such as low, moderate and higher percentages of participants in job position such as staff nurse, specialist nurse, charge nurse, nurse supervisor, OT technician, physiotherapist and lab technician

Job Position	Low		Moderate		High	
	n	%	n	%	n	%
Staff Nurse	92	46	17	8.5	18	9
Specialist Nurse	8	4	2	1	1	0.5
Charge Nurse	6	3	1	0.5	1	0.5
Nurse Supervisor	4	2	2	1	1	0.5
OT tech	8	4	3	1.5	4	2
Physiotherapist	5	2.5	1	0.5	1	0.5
Lab technician	14	7	5	2.5	6	3

Table 8: Job wise distribution

Job Position	High	
	n	%
Staff Nurse	18	9
Specialist Nurse	1	0.5
Charge Nurse	1	0.5
Nurse Supervisor	1	0.5
OT tech	4	2
Physiotherapist	1	0.5
Lab technician	6	3

Service Area	Low		Moderate		High	
	n	%	n	%	n	%
ER/Casualty	15	7.5	3	1.5	2	1
Ward	59	29.5	10	5	12	6
OT	15	7.5	4	2	5	2.5
ICU	29	14.5	8	4	5	2.5
Others	20	10	5	2.5	8	4

Table 9: Level of Burn Out in different Service Area: Level of burnout such as low, moderate and higher percentages of participants in service area such as casualty, ward, OT, ICU, lab and physiotherapy department

Table 10: High Burnout in different Service Area: Higher percentages of burnout in participants of service area such as casualty, ward, OT, ICU, and others such as lab and physiotherapy department

Service Area	High	
	n	%
ER/Casualty	2	1
Ward	12	6
OT	5	2.5
ICU	5	2.5
Others	8	4

Strengths of the study:

The study justified the essential factor of burnout using Maslach Burnout Inventory-Human Services Survey. The study includes the opinion of all type of healthcare professionals including nurses from all specialities and all grades, physiotherapists, lab technicians, OT technicians.

Limitations:

This study is limited to a single tertiary care teaching hospital healthcare professionals. It did not elucidate the individuals who changed their profession for various reasons.

Conclusion:

Derived from our results, we conclude that direct care workers perceive more burnout compared with other health care professionals. Surprisingly, direct care givers working in ward perceives more burnout than the caregivers from intensive care unit or from the emergency room. It shows that the younger professionals lack in experience in managing the patients working in the ward possess more burnout rather than the experienced professionals handling the emergency patients. The technicians working in the laboratory and in theatre

too experience the high level of burnout due to the increase number of patients attending the outpatient as well as the inpatient department in tertiary care hospital. Perceived workload and time management influence the level of burnout in healthcare professionals.

Future Prospects:

Health care Managers and Administrators should make policies in reducing the dissatisfaction in job and thereby reducing burnout of their staff. Majority of the staff members were inexperienced, so there is a need of in-service education and training in preparing the staff members. Steps

should be taken to consider their work performance and overtime performance with respect to their Remuneration. Periodic assessment and evaluation of staff members is essential to know their problems in work place. Effective supervision, continuous ongoing training, proper vacation and sick leave, support from their superiors and colleagues, Comfortable work environment helps the staff member to work smoothly and thereby, enhance their career growth as well as their organizational growth by retaining their service in the organization.

Keywords:

Abbreviation	Expansion
ICU	Intensive Care Unit
OT	Operation Theatre
ER	Emergency Room
MBI	Maslach Burnout Inventory
EE	Emotional Exhaustion
DP	DePersonalisation
PA	Personal Accomplishment

Competing Interests:

The authors declare that they have no competing interests.

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