Original Article

Degree of Burnout among Emergency Healthcare Workers and Factors influencing level of Burnout: A pilot study

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ABSTRACT

Objectives: *(1) To examine the level of burnout reported by healthcare workers of emergency department. (2) To find out the relationship between burnout and demographic variables like age, religion, marital status, years married, general and professional education, children and number of children. (3) To explore factors that may influence the level of burnout among healthcare workers working in emergency department.* ***Methods:*** *Seven healthcare workers working in the emergency department of Gauhati Medical College Hospital, Guwahati were be selected by non probability purposive sampling. Demographic proforma, factors influencing level of burnout, and Assamese translation of Maslach Burnout Inventory were the tools used.* ***Results:*** *In emotional exhaustion, there was low-level burnout. High-level burn out was seen in depersonalisation or loss of empathy. Moderate burnout was found in personal achievement.* ***Conclusion:*** *While findings of the present study have several implications in terms of improving resources and environment in the emergency healthcare delivery system, similar study, replicated on a large sample, would help to draw conclusions that are more definite and generalisable to a larger population.*

Keywords*: Sampling, Demography, Dependent variable, Depersonalisation.*

Introduction

Every individual has certain projects, hopes, desires. The organisation an individual works for bears an inescapable role on their psychic apparatus. Sometimes, the impact of the organisation is such that, the individual suffers for their psychic aspects not having been taken into account by the organisation.[1]

A consequence of the psychic apparatus of the worker can be the burnout syndrome. It is an emotional answer to certain situations. Such situations include intense work relations with other people that result in chronic stress. Another mechanism is the disparity between the expectation and compensation. This is observable in career-related professional development and dedication.[2,3]

Burnout syndrome is a gradual process. Fluctuations in mood and lack of encouragement progress to both physical and mental symptoms. The

sense of relationship with work that a worker usually has to have is lost. Things cease to be important anymore. Components of the syndrome include emotional and physical exhaustion, cynicism and lacking affection, and ultimately a feeling of reduced personal accomplishment.[4]

Need for the study

Although burnout in large organisations has been examined in many studies, in general there has been a lack of concentration on healthcare workers and on hospital settings, especially in India. In addition, there are relatively few studies investigating burnout among Indian healthcare workers. Unfortunately most of the studies on burnout in healthcare workers have been conducted in Europe and United States. There are few studies from Asian countries. In view of the paucity of Indian studies in this area, the present work was undertaken to identify the predictors of burnout in an Indian healthcare population. As the socio-cultural background of Indian healthcare workers varies widely from their western counterparts, we expected to identify predictors of burnout relevant to them. Finding predictors of burnout relevant in an Indian setting should have important policy implications in human resource management in this sector in similar developing countries.[5]

A health workforce crisis is crippling health service delivery in many low-income countries. High-income countries with high salaries and attractive living conditions are drawing qualified doctors and nurses from poorer countries to fill gaps in their own human resources pool. This migration of skilled labour is depleting human capital in many developing countries.[6] The human resource crisis in India is acute. To the best of investigators' knowledge, there is a paucity of such work in this field in the state of Assam, which is another major reason to undertake this study. Moreover, with the increasing complexities and the changing patterns of society, the stress in the environment leading to burnout is increasing day by day. Study of burnout and factors influencing it will therefore enable us to find out suitable ways to reduce stress among healthcare workers and thereby improving the quality of health care. Thus the need for the study is felt.

Therefore, this study is designed to identify degree and factors that influence burnout among emergency healthcare workers in hospital.

Statement of the problem

Degree of burnout among emergency healthcare workers and factors influencing level of burnout[7]

Objectives of the study

1. To examine the degree of burnout reported by healthcare workers of emergency department.
2. To find out the relationship between burnout and demographic variables like age, sex, religion, marital status, years married, general and professional education, children and number of children.
3. To explore factors that may influence the level of burnout among healthcare workers working in emergency department.

Material and Methods

The study protocol is discussed in an original article.[8] The study was carried out in the emergency department of Gauhati Medical College and Hospital (GMCH), Assam in a pilot sample of seven (ten per cent of a calculated sample of 62) among willing healthcare workers who were available during data collection from September 2014 to August 2015.

Description of tools

Demographic proforma: It is prepared to gather the background information regarding the participations under study. It consists of eight items. Variables are socio-demographic data, e.g. age, religion, marital status, years married, general and professional education, children, and number of children.

Factors influencing level of burnout: It consists of 12 items. These are travelling time to work, working hours per week, doctor/doctor conflict, nurse/nurse conflict, nurse/doctor role conflict, availability of doctors/nurses to work with, lack or inadequate doctor/nursing personnel, poor wages, too frequent night duties, inadequate security during night duties, job status, and years in current job.

It was evident from the literature review that because of the very nature of the type of data required to be analysed to assess level of burnout and factors that may influence the level of burnout among healthcare workers, standardised tools are

essential. After an extensive literature search, authors found that Maslach Burnout Inventory (MBI)[9] is the golden scale for assessing burnout among healthcare workers.

Burnout self-test (MBI) is subdivided into three categories:
- Section A – Emotional exhaustion
- Section B – Depersonalisation
- Section C – Personal achievement

MBI contains 22 items which are answered as never, a few times per year, once a month, a few times per month, once a week, a few times per week and every day.

Section A – Emotional exhaustion contains seven items

Section B – Depersonalisation contains seven items

Section C – Personal achievement contains eight items

Scoring

Section A: Emotional exhaustion

Emotional exhaustion: Testifies to fatigue at the very idea of work, chronic fatigue, trouble sleeping, physical problems. For the MBI, as well as for most authors, "exhaustion would be the key component of the syndrome." Unlike depression, the problems disappear outside work.
- Total 17 or less: Low-level burnout
- Total between 18 and 29 inclusive: Moderate burnout
- Total over 30: High-level burnout

Section B: Depersonalisation

Depersonalisation (or loss of empathy): Rather a "dehumanisation" in interpersonal relations. The notion of detachment is excessive, leading to cynicism with negative attitudes with regard to patients or colleagues, feeling of guilt, avoidance of social contacts and withdrawing into oneself. The professional blocks the empathy he can show to his patients and/or colleagues.
- Total 5 or less: Low-level burnout
- Total between 6 and 11 inclusive: Moderate burnout
- Total of 12 and greater: High-level burnout

Section C: Personal achievement

The reduction of personal achievement: The individual assesses himself negatively, feels he is unable to move the situation forward. This component represents the demotivating effects of a difficult, repetitive situation leading to failure despite efforts. The person begins to doubt his genuine abilities to accomplish things. This aspect is a consequence of the first two.
- Total 33 or less: High-level burnout
- Total between 34 and 39 inclusive: Moderate burnout
- Total greater than 40: Low-level burnout

A high score in the first two sections and a low score in the last section may indicate burnout.

Translation of the scale

The inventory was translated from English into local language Assamese by an expert not related to this study. It was later back-translated into English by another independent expert, not acquainted with the original version. The back-translation was subsequently compared with the original version by a psychiatrist for conceptual equivalence of the items. Necessary finer adjustments were made to convey the correct information to the participants.

Reliability of the scale

The reliability of the scale was established by data collected from ten staff nurses, who are working in the maternity department of GMCH.[10] The reliability has been drawn by using split-half Spearman Brown formula:

$$r_{SB} = 2r/(1+r)$$

where r is the Pearson product moment correlation co-efficient.

Reliability of emotional exhaustion-

The calculated value of r = 0.79

Hence, r_{SB} = 0.88

Since the calculated value of r_{SB} (reliability) is 0.88, which is highly reliable, the tool can be used for main study.

Reliability of depersonalisation-

The calculated value of r = 0.65

Hence, r_{SB} = 0.79

Since the calculated value of r_{SB} (reliability) is 0.79, which is highly reliable, the tool can be used for main study.

Reliability of personal achievement-

The calculated value of r = 0.76

Hence, r_{SB} = 0.86

Since the calculated value of r_{SB} (reliability) is 0.86, which is highly reliable, the tool can be used

for main study.

Ethical clearance

The study was approved by the Institutional Ethical Committee.

Statistical analysis

Data obtained was analysed using descriptive statistics such as mean, standard deviation, and frequency distribution, as well as inferential statistics such as non-parametric test (chi-square).

Results

Demographic variables

The demographic variables of emergency healthcare workers of GMCH are presented in Table 1.

Table-1: Frequency and percentage distribution of healthcare workers of emergency department of Gauhati Medical College Hospital (N=7)

Demographic variables	Frequency	Per cent (%)
Age (years)		
20-30	3	42.9
30-40	3	42.9
40-50	1	14.3
Religion		
Hindu	6	85.7
Muslim	1	14.3
Marital status		
Single	3	42.9
Married/with partner/cohabitating	4	57.1
Years married		
Does not apply	3	42.9
< 5 years	2	28.6
5-10 years	2	28.6
General education		
HSLC	1	14.3
HS	2	28.6
Graduate	2	28.6
Others	2	28.6
Professional education		
Doctor	4	57.1
Nursing	2	28.6
Paramedical	1	14.3
Child		
Yes	4	57.1
No	3	42.9
Number of children		
1	3	42.9
2	1	14.3
Does not apply	3	42.9

HSLC=High School Leaving Certificate, HS=Higher Secondary

Factors influencing burnout

Factors influencing burnout of emergency healthcare workers of GMCH are presented in Table 2.

Table-2: Frequency and percentage distribution of factors influencing burnout (N=10)

Factors influencing burnout	Frequency	Per cent (%)
Time to reach workplace		
< 30 minutes	2	28.6
30-60 minutes	2	28.6
> 2 hours	3	42.9
Hours per week		
36-42 hours	2	28.6
42-48 hours	2	28.6
> 48 hours	3	42.9
Doctor/doctor role conflict		
Yes	1	14.3
No	6	85.7
Nurse/nurse role conflict		
Yes	3	42.9
No	2	28.6
Doctor/nurse role conflict		
Yes	1	14.3
No	6	85.7
Availability of doctors/nurses to work with		
Yes	4	57.1
No	3	42.9
Lack or inadequate doctor/nursing personnel		
Yes	7	100
No	0	0
Less salary		
Yes	6	85.7
No	1	14.3
Too frequent night duties		
Yes	2	28.6
No	5	71.4
Inadequate security during night duty		
Yes	4	57.1
No	2	28.6
Job status		
Permanent	3	42.9
Contractual	2	28.6
Trainee	2	28.6
Years in current job		
0-5 Years	5	71.4
None*	2	28.6

N=Number, *Trainees

Burnout (emotional exhaustion, depersonalisation and personal achievement)

Burnout of emergency healthcare workers of GMCH is presented in Table 3 and Figure 1.

Table-3: Burnout (emotional exhaustion, depersonalisation and personal achievement) (N=10)

Burnout	Mean	Median	SD	SE
Burnout (or emotional exhaustion)	14.1429	15	3.305	8.745
Depersonalisation or loss of empathy	14.2857	12	3.771	9.978
The reduction of personal achievement	35.7143	39	2.436	6.447

N=Number, SD=Standard Deviation, SE=Standard Error

Association between demographic variables and emotional exhaustion

Table 4 shows association between demographic variables and emotional exhaustion.

Association between demographic variables and depersonalisation

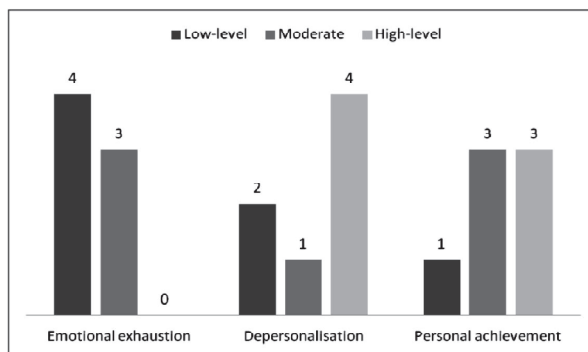Table 5 shows association between demographic variables and depersonalisation.

Figure 1: Burnout (emotional exhaustion, depersonalisation and personal achievement)

Table-4: Association between demographic variables and emotional exhaustion (N=7)

Demographic variables	Low-level (<17)	Moderate (18-29)	Chi-square	df	P-value
Age (years)			1.556	2	.459[NS]
20-30	1	2			
30-40	2	1			
40-50	1	0			
Religion			1.556	1	.212[NS]
Hindu	4	2			
Muslim	0	1			
Marital status			7.000	1	.008[**]
Single	0	3			
Married/with partner/cohabitating	4	0			
Years married			7.000	2	.030[*]
Does not apply	0	3			
<5 years	2	0			
5-10 years	2	0			
General education			4.958	3	.175[NS]
HSLC	1	0			
HS	1	1			
Graduate	0	2			
Others	2	0			
Professional education			.875	2	.646[NS]
Doctor	2	2			
Nursing	1	1			
Paramedical	1	0			
Child			7.000	1	.008[**]
Yes	4	0			
No	0	3			
Number of children			7.000	2	.030[*]
1	3	0			
2	1	0			
Does not apply	0	3			

df = Degree of Freedom, NS = Not Significant, HSLC = High School Leaving Certificate, HS = Higher Secondary, * = significant at 5% level, ** = significant at 1% level

Table-5: Association between demographic variables and depersonalisation (N=7)

Demographic variables	Low-level (≤ 5)	Moderate (6-11)	High-level (≥ 12)	Chi-square	df	P-value
Age (years)				3.889	4	.421 NS
20-30	0	1	2			
30-40	1	1	1			
40-50	1	0	0			
Religion				2.917	2	.233 NS
Hindu	2	1	3			
Muslim	0	1	0			
Marital status				4.278	2	.118 NS
Single	0	2	1			
Married/with partner/cohabitating	2	0	2			
Years married				4.278	4	.370 NS
Does not apply	0	2	1			
<5 years	1	0	1			
5-10 years	1	0	1			
General education				14.000	6	.030*
HSLC	0	0	1			
HS	0	0	2			
Graduate	0	2	0			
Others	2	0	0			
Professional education				7.000	4	.136 NS
Doctor	2	2	0			
Nursing	0	0	2			
Paramedical	0	0	1			
Child				4.278	2	.118 NS
Yes	2	0	2			
No	0	2	1			
Number of children				6.222	4	.183 NS
1	1	0	2			
2	1	0	0			
Does not apply	0	2	1			

df = Degree of Freedom, NS = Not Significant, HSLC = High School Leaving Certificate, HS = Higher Secondary, * = significant at 5% level

Association between demographic variables and personal achievement

Table 6 shows association between demographic variables and personal achievement.

Association between selected factors and emotional exhaustion

Table 7 shows association between selected factors and emotional exhaustion.

Association between selected factors and depersonalisation

Table 8 shows association between selected factors and depersonalisation.

Association between selected factors and personal achievement

Table 9 shows association between selected factors and personal achievement.

Discussion

The study has been conducted among the healthcare workers of emergency department of GMCH. The study population comprised of doctors, nursing personnel, paramedical, and support staffs working in the department. Emergency departments in hospital healthcare services are highly stressful environments.

Demographic variables

Four doctors, two nursing personnel, and one paramedical staff constituted the sample for this pilot study. Majority of them were young, Hindu, with general education of higher secondary and graduation, married for more than five years, having one child.

Factors influencing burnout

Most of participants required more than two

Table-6: Association between demographic variables and personal achievement (N=7)

Demographic variables	Low-level (≥ 40)	Moderate (34-39)	High-level (≤ 33)	Chi-square	df	P-value
Age (years)				3.111	4	.539 [NS]
20-30	0	1	2			
30-40	1	1	1			
40-50	0	1	0			
Religion				1.556	2	.459 [NS]
Hindu	1	3	2			
Muslim	0	0	1			
Marital status				1.556	2	.459 [NS]
Single	0	1	2			
Married/with partner/cohabitating	1	2	1			
Years married				3.889	4	.421 [NS]
Does not apply	0	1	2			
<5 years	0	1	1			
5-10 years	1	1	0			
General education				11.667	6	.070 [NS]
HSLC	1	0	0			
HS	0	1	1			
Graduate	0	0	2			
Others	0	2	0			
Professional education				4.667	4	.323 [NS]
Doctor	0	2	2			
Nursing	1	1	0			
Paramedical	0	0	1			
Child				1.556	2	.459 [NS]
Yes	1	2	1			
No	0	1	2			
Number of children				3.111	4	.539 [NS]
1	0	1	2			
2	1	1	1			
Does not apply	0	1	0			

df=Degree of Freedom, NS=Not Significant, HSLC=High School Leaving Certificate, HS=Higher Secondary

hours to reach workplace and worked for more than 48 hours per week. Majority neither perceived any professional role conflict nor complained of availability to work with. But, all agreed that there was lack or inadequate staff. Most of them felt that salary was less. Though night duties were not that frequent, majority expressed inadequate security during night duties. Maximum numbers had permanent job and working for up to five years.

Burnout (emotional exhaustion, depersonalisation and personal achievement)

Four healthcare workers had low-level and three had moderate burnout in emotional exhaustion. In depersonalisation, the burnout of low-level, moderate, and high-level were found in two, one, and four workers respectively. Three each had high-level burnout in personal achievement and one low-

level burnout.

Association between demographic variables and burnout

Those emergency healthcare workers of GMCH who were single and without child were emotionally exhausted (P-value of .008, significant at one per cent level). Burnout in depersonalisation was high when general education was less; with more general education, burnout in depersonalisation decreases (P-value of .030, significant at five per cent level).

Association between selected factors and burnout

Contractual job was associated with high-level burnout in depersonalisation (P-value of 0.39, significant at five per cent level). Burnout in personal

Table-7: Association between selected factors and emotional exhaustion (N=7)

Factors influencing burnout	Low-level (< 17)	Moderate (18-29)	Chi-square	df	P-value
Time to reach workplace			3.938	2	.140 NS
<30 minutes	1	3			
30-60 minutes	2	0			
>2 hours	1	0			
Hours per week			4.278	2	.118 NS
36-42 hours	0	2			
42-48 hours	2	0			
>48 hours	2	1			
Doctor/doctor role conflict			1.556	1	.212 NS
Yes	0	1			
No	4	2			
Nurse/nurse role conflict			.139	1	.709 NS
Yes	2	1			
No	1	1			
Doctor/nurse role conflict			.875	1	.350 NS
Yes	1	0			
No	3	3			
Availability of doctors/nurses to work with			.194	1	.659 NS
Yes	2	2			
No	2	1			
Lack or inadequate doctor/nursing personnel			N A		
Yes	4	3			
No	0	0			
Less salary			.875	1	.350 NS
Yes	3	3			
No	1	0			
Too frequent night duties			.058	1	.809 NS
Yes	1	1			
No	3	2			
Inadequate security during night duty			1.500	1	.221 NS
Yes	2	2			
No	2	0			
Job status			4.958	2	.084 NS
Permanent	3	0			
Contractual	1	1			
Trainee	0	2			
Years in current job			3.733	1	.053 NS
0-5 years	4	1			
None*	0	2			

N=Number, df=Degree of Freedom, NS=Not Significant, NA=Not Applicable, *Trainee

achievement varied with the perception of doctor/ nurse role conflict (P-value of .030, significant at five per cent level).

Earlier studies

O'Mahony[11] examines levels of burnout experienced by emergency nurses and the characteristics of their work environment to determine if there is a relationship between the two. A literature review of recent articles on emergency nurses' burnout and contributing factors was undertaken. A quantitative study, in which nurses were asked to indicate the extent of their agreement with a series of statements on burnout and the working environment, was then undertaken, and the results were analysed to ascertain the extent to which the two topics are related. The results indicate that 52% of nurses in an emergency department in Ireland experience high levels of emotional exhaustion and depersonalisation, which are significantly related to the nature of their work environment. Improvements to the environment and

Table-8: Association between selected factors and depersonalisation (N=7)

Factors influencing burnout	Low-level (≤ 5)	Moderate (6-11)	High-level (≥ 12)	Chi-square	df	P-value
Time to reach workplace				8.167	4	.086 NS
< 30 minutes	0	2	2			
30-60 minutes	2	0	0			
> 2 hours	0	0	1			
Hours per week				7.194	4	.126 NS
36-42 hours	0	2	0			
42-48 hours	1	0	1			
> 48 hours	1	0	2			
Doctor/doctor role conflict				2.917	2	.233 NS
Yes	0	1	0			
No	2	1	3			
Nurse/nurse role conflict				2.222	2	.329 NS
Yes	1	0	2			
No	0	1	1			
Doctor/nurse role conflict				1.556	2	.459 NS
Yes	0	0	1			
No	2	2	2			
Availability of doctors/nurses to work with				.194	2	.907 NS
Yes	1	1	2			
No	1	1	1			
Lack or inadequate doctor/nursing personnel				N A		
Yes	2	2	3			
No	0	0	0			
Less salary				2.917	2	.233 NS
Yes	1	2	3			
No	1	0	0			
Too frequent night duties				3.733	2	.155 NS
Yes	0	0	2			
No	2	2	1			
Inadequate security during night duty				.750	2	.687 NS
Yes	1	1	2			
No	1	0	1			
Job status				10.111	4	.039*
Permanent	2	0	1			
Contractual	0	0	2			
Trainee	0	2	0			
Years in current job				7.000	2	.030*
0-5 years	2	0	3			
None**	0	2	0			

N=Number, df=Degree of Freedom, NS=Not Significant, NA=Not Applicable, *=Significant at 5% level, **=Trainee

to education are required to reduce the risk of nurses developing burnout in the future.

Due to the inherent demands of their profession, doctors and nurses are at great risk of suffering from burnout caused by job stress. Bagaajav et al[12] examined the prevalence of burnout among doctors and nurses in Mongolia and identified the factors influencing their burnout. A self-administered questionnaire of 180 doctors (45.9%) and 212 nurses (54.1%) resulted in a response rate of 87%. Burnout was measured by the Copenhagen Burnout Inventory (CBI) in three scales: personal burnout, work-related burnout, and client-related burnout. Job stress was measured by the effort-reward imbalance (ERI) model. Compared with the prior studies of hospital staffs in other countries, doctors and nurses in Mongolia had relatively higher burnout rates, with personal, work-related and client-related average scores of 45.39, 44.45, and 32.46, respectively. Multiple regression analysis revealed that ERI significantly influenced all dimensions of burnout but over-commitment significantly

Table-9: Association between selected factors and personal achievement (N=7)

Factors influencing burnout	Low-level ($\geq$ 40)	Moderate (34-39)	High-level ($\leq$ 12)	Chi-square	df	P-value
Time to reach workplace				4.667	4	.323 [NS]
< 30 minutes	1	1	2			
30-60 minutes	0	2	0			
> 2 hours	0	0	1			
Hours per week				5.444	4	.245 [NS]
36-42 hours	0	0	2			
42-48 hours	0	1	1			
> 48 hours	1	2	0			
Doctor/doctor role conflict				1.556	2	.459 [NS]
Yes	0	0	1			
No	1	3	2			
Nurse/nurse role conflict				5.000	2	.082 [NS]
Yes	1	2	0			
No	0	0	2			
Doctor/nurse role conflict				7.000	2	.030*
Yes	1	0	0			
No	0	3	3			
Availability of doctors/nurses to work with				1.556	2	.459 [NS]
Yes	1	2	1			
No	0	1	2			
Lack or inadequate doctor/nursing personnel				N A		
Yes	1	3	3			
No	0	0	0			
Less salary				1.556	2	.459 [NS]
Yes	1	2	3			
No	0	1	0			
Too frequent night duties				3.733	2	.155 [NS]
Yes	1	1	0			
No	0	2	3			
Inadequate security during night duty				.750	2	.687 [NS]
Yes	1	2	1			
No	0	1	1			
Job status				5.444	4	.245 [NS]
Permanent	1	2	0			
Contractual	0	1	1			
Trainee	0	0	2			
Years in current job				3.733	2	.155 [NS]
0-5 years	1	3	1			
None**	0	0	2			

N=Number, NS = Not Significant, *=significant at 5% level, NA = Not Applicable, **=Trainee

influenced only personal and work-related burnout. Both ERI and over-commitment were different among professions.

Previous research into the causes of burnout has mainly been concerned with external triggers, such as onerous work criteria or organisational or social influences. Factors such as individual reactions and personality have largely been ignored as a possible aetiology of burnout. In preparation for a long-term study, in a general cross-sectional study, Bühler and Land[13] investigate the relationship between burnout and personality variables. Different personality variables that have a possible impact on burnout were determined in a number of prestudies. The data were gathered from 119 people working in intensive care units. MBI was used as well as certain subscales of the following personality questionnaires: Eysenck Personality Inventory (EPI), Inventory of Aggressivity (IA), Trier Personality Questionnaire (TPQ), Scales of Control (SC), Locus of Control (LC), and the Logo-test (LOGO). The scales of mental health, respectively

psychoprotection, external locus of control, and neuroticism, were confirmed as being statistically relevant concerning burnout.

A similar study was conducted by Thorsen *et al*,[14] among 101 staff nurses working in Obstetrics and Gynaecology at a referral hospital in Malawai, found nearly three quarters (72%) reported emotional exhaustion, over one third (43%) reported depersonalisation, while almost three quarters (74%) experienced reduced personal accomplishment. In another study conducted by Lasebikan and Oyetunde[15] in Nigeria among 292 nurses showed that doctor/nurse conflict, inadequate nursing personnel, too frequent night duties, poor wages were predictors of burnout. Lin *et al*[16] conducted a study in China among 128 nurses. Years of experience and professional title had a significant positive relationship with emotional exhaustion and personal accomplishment.

Stress is one of the most common problems. One manifestation of stress is burnout. Burnout and other stress-related illnesses among medical professionals are receiving increased attention and have been described in many branches of medical practice including dentists, nurses, etc., The purpose of the study by Khurana and Khurana[17] was to measure the prevalence of stress and burnout in medical professionals in Rajasthan. The MBI-Human Service Survey (MBI-HSS) and a demographic questionnaire of authors' own design were sent to 1,735 medical professional of various branches and different location throughout the state of Rajasthan. In response to that, 627 (36%) surveys were returned, of which 576 (92%) were found complete for analysis so later group constitute as sample for analysis. 29.16% of medical professional showed high level of emotional exhaustion, 20% showed high level of depersonalisation, and 17.9% showed low personal accomplishment. Young professionals showed more sensitivity towards burnout. Females were more prone to burnout as compared to males. Burnout is an important problem in medical professionals in Rajasthan. Difference in approach to work and perceived environment at workplace, unrewarding career, unsupported behaviour of peer group, balance between work and family needs appear to be important factors in burnout.

Limitations

As the study was carried out in the emergency department of a tertiary care teaching hospital, the findings cannot be generalised. Moreover, being a pilot study, the sample size was small.

Conclusions

Workload and tension result from the very organisation and work dynamics of the emergency department; thus, arises the need to look for ways of re-organising this work dynamics in order to decrease stress.[18] Findings of the present study have several implications as far as improving the resources and environment for emergency health-care workers; thus, having a positive impact in delivery of healthcare services and better patient outcomes. Similar study, replicated on a large sample, would help to draw conclusions that are more definite and generalisable to a larger population.

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