

A study to assess burnout among nurses of maternity department in Gauhati Medical College Hospital, Assam

Abstract

Background: Burnout in healthcare workers, especially among nurses, can have an impact on overall healthcare delivery system. For health in general and maternal health in particular, wellbeing of healthcare workers, including nurses, is of paramount importance. **Material and methods:** This study aimed to assess burnout among nurses working in the maternity department. One hundred nurses of a tertiary care centre, selected by non-purposive convenient sampling, were examined by a standardised questionnaire. Data were analysed by descriptive statistics. **Results:** Burnout in depersonalisation was moderate while that in emotional exhaustion and personal achievement were of low-levels. **Conclusion:** Understanding the nature of the problem of burnout can guide in better management.

Keywords: Healthcare Personnel. Maternal Health. Depersonalisation.

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Received: 1 July 2015

Accepted: 12 September 2015

Epub: 16 December 2015

DOI: 10.5958/2394-2061.2016.00011.2

Introduction

Burnout is described as feelings associated with failure and exhaustion. At both physical and emotional levels, this exhaustion is felt. High expectation, persistent stress, experience of pressure, and lack of satisfaction can result in it. Depletion of resources is the consequence. Subsequently, negative impact is felt both on work and elsewhere in life. The organisation also is affected.[1]

The nature of work itself makes healthcare professionals vulnerable to burnout.[2] Among all healthcare professionals, including physicians, highest levels of burnout have been reported by nurses.[3-5] The key to a well-functioning system is a motivated workforce. An important indicator for performance of the health system is emergency obstetric care. It is the fundamental right of a woman. Top priorities for safe motherhood are strengthening human resources capacity and improving environment. Performance of the health worker is crucial for the health system to function successfully. Quality of care is also directly related. Motivation, skills, intellect, and resources determine performance.[6]

Both quality and quantity of the services and care provided by healthcare workers are affected by burnout. Patient outcomes and health infrastructure face the impact. As a consequence, the challenge to reduce maternal mortality is exacerbated. It is of utmost significant that the wellbeing of healthcare workers is preserved, though often overlooked, for health in general and maternal health

in particular. This facilitates care and services that are threatened by burnout.[2]

Need for the study

Many studies have examined burnout in large organisations.[7] But, such studies in hospital settings are lacking, mainly in India.[7] Most of the burnout studies on nurses are conducted in Europe and United States.[8] There is a wide variation in the socio-cultural background of Indian nurses compared to their western counterparts.[8] Moreover, gradually there is an increase in the environmental stress due to complexities and changes of society. Thus, the need for the study is felt.

Statement of the problem

A study to assess burnout among nurses of maternity department in Gauhati Medical College Hospital (GMCH), Assam.

Objectives of the study

To examine the level of burnout reported by nurses of maternity department.

Methodology

The methodology is discussed in an original article[9] and outlined below.

Research approach: Descriptive approach was selected as it was found to be most suitable for studying the problem under study.

Research design: A descriptive survey design was selected for the purpose of the present study (Figure 1).

Setting of the study: GMCH, Assam was selected as the setting of the study.

Population: Nurses who were working in the maternity departments of GMCH and Annex GMCH.

Sample: For the purpose of present study, 100 numbers of nurses were selected.

Sampling technique: Non-probability convenience sampling method was adopted for selecting the samples in the present study. The criteria for selection of the sample were:

1. Nursing personnel who were available during the data collection period (from 30 December 2013 to 16 February 2014).
2. Nursing personnel who were willing to participate in the study.
3. Nurses who were female.

Tool: 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 among nurses, standardised tools

are essential. After an extensive literature search, investigators found that the Maslach Burnout Inventory (MBI) is the golden scale for assessing burnout among nurses.[10]

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:

1. I feel emotionally drained by my work.
2. Working with people all day long requires a great deal of effort.
3. I feel like my work is breaking me down.
4. I feel frustrated by my work.
5. I feel I work too hard at my job.
6. It stresses me too much to work in direct contact with people.
7. I feel like I'm at the end of my rope.

Section B – Depersonalisation contains seven items:

1. I feel I look after certain patients/clients impersonally, as if they are objects.
2. I feel tired when I get up in the morning and have to face another day at work.
3. I have the impression that my patients/clients make me responsible for some of their problems.
4. I am at the end of my patience at the end of my work day.
5. I really don't care about what happens to some of my patients/clients.
6. I have become more insensitive to people since I've been working.
7. I'm afraid that this job is making me uncaring.

Section C – Personal achievement contains eight items:

1. I accomplish many worthwhile things in this job.
2. I feel full of energy.
3. I am easily able to understand what my patients/clients feel.
4. I look after my patients'/clients' problems very effectively.
5. In my work, I handle emotional problems very calmly.
6. Through my work, I feel that I have a positive influence on people.
7. I am easily able to create a relaxed atmosphere with my patients/clients.
8. I feel refreshed when I have been close to my patients/clients at work.

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.

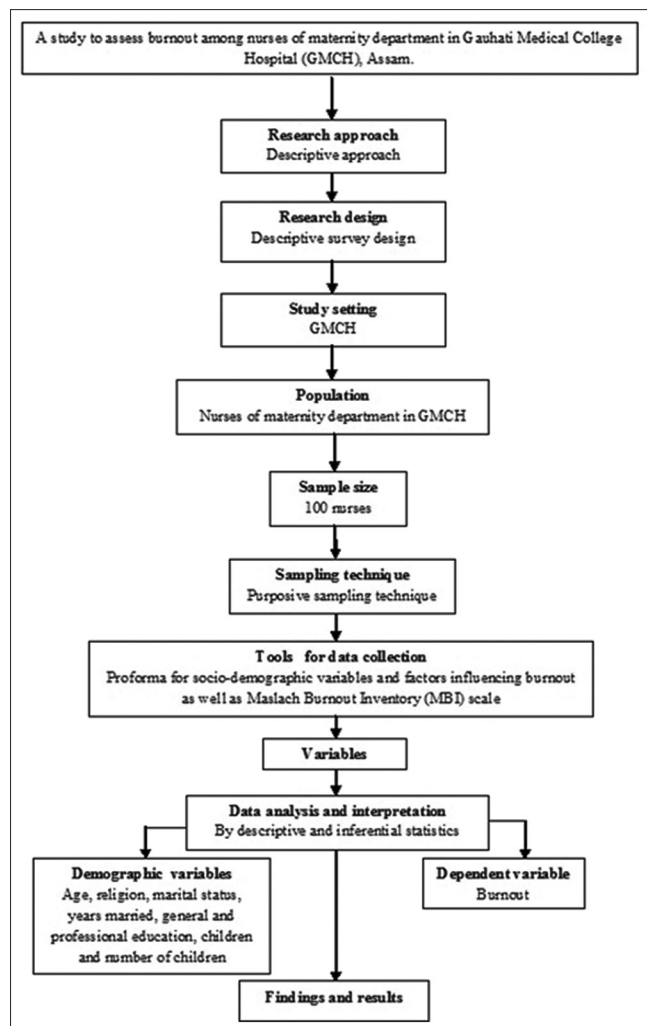


Figure 1: Schematic representation of research design.

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. The reliability has been drawn by using Split-Half Spearman Brown Formula. The formula is as follows:

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

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. Formal written administrative permission was obtained from the Medical Superintendent, Nursing Superintendent, and the Head of the Department of the Obstetrics and Gynaecology Department of GMCH. Informed consent was obtained from participants.

Pilot study: [11] The pilot study aimed at determining the adequacy of study methods and procedures, finding out the feasibility of conducting the study, assessing the appropriateness and quality of instruments and deciding the plan of statistical analysis.

After obtaining the formal administrative permission from the concerned authorities, the pilot study of the present project was conducted in GMCH. The study was conducted from 5 August 2013 to 11 August 2013 and was carried out on ten samples of nurses working in maternity wards.

The subjects chosen were similar in characteristics to those of population under study. It was found that all items of the tools were clear and unambiguous. The investigators faced no problems in conducting the pilot study.

Data collection procedure: Formal administrative permission was obtained from the authorities to conduct the study at GMCH. The period of data was from 30 December 2013 to 16 February 2014. Data collected for the present study was through structured questionnaires. Participants were informed of the purpose for the study and those interested were given questionnaires that included the measure employed in this study.

The test was administered among nurses working in maternity wards. The investigators gave self-introductions and explained the purpose of the study to obtain free and frank responses. The participants were assured confidentiality of their responses. It took a minimum of ten to 15 minutes for the participants to respond to the questionnaire and investigators were personally present each time the test was administered.

Data analysis: Data obtained was analysed using descriptive statistics such as mean, standard deviation, and frequency distribution.

Analysis and interpretation of the data

Description of sample characteristics: The sample in the present study consisted of 100 nurses working in the maternity department in GMCH.

Table 1 shows that among 100 nurses, majority of the nurses (42%) were in the age group of 31-40 years, 27% of nurses were in the age group of 20-30 years, 16% of nurses were above 50 years, and 15% of nurses were of 41-50 years

of age. Out of 100 nurses, majority (88%) of nurses were Hindu, nine per cent of nurses were Muslim, and three per cent of nurses were Christian. Majority (72%) of nurses were married, 24% of nurses were single, and four per cent of nurses were widow/separated/divorced. Majority (31.58%) of nurses' duration of marriage was for more than 20 years, 28.95% of nurses' duration was ten to 20 years, and 19.74% each were married for five to ten, and less than five years. Majority (63%) of nurses were having children and 37% of nurses had no children. 50.79% of nurses were having two numbers of children, 42.86% of nurses were having one child, and 6.35% of nurses were having three numbers of children. Almost half of the sample (55%) educated up to Higher Secondary (HS), 24% completed High School Leaving

Certificate (HSLC), and 21% studied up to graduation. Equal numbers (46%) had professional qualifications of Auxillary Nursing and Midwifery (ANM) and General Nursing and Midwifery (GNM), and eight per cent of nurses were Post Basic.

Table 2 shows that in emotional exhaustion and personal achievement, there were low-level burnouts. Moderate burnout was found in depersonalisation (mean=7.43, median 7.000, standard deviation [SD]=6.217).

In emotional exhaustion, the low-level, moderate, and high-level burnouts were 80, 18, and two respectively. In depersonalisation, the low-level, moderate, and high-level burnouts were 39, 38, and 23 respectively. In personal achievement, the low-level, moderate, and high-level burnouts were 84, 11, and five respectively (Table 3 and Figure 2).

Table 1: Socio-demographic profile of nurses

Socio-demographic data	Frequency	Percentage
Age (years)		
20-30	27	27
31-40	42	42
41-50	15	15
>50	16	16
Religion		
Hindu	88	88
Muslim	9	9
Christian	3	3
Marital status		
Single	24	24
Married	72	72
Widow/separated/divorced	4	4
Duration of marriage (years)		
<5	15	19.74
5-10	15	19.74
10-20	22	28.95
>20	24	31.58
Child		
Yes	63	63
No	37	37
Number of children		
1	27	42.86
2	32	50.79
3	4	6.35
Education		
HSLC	24	24
HS	55	55
Graduate	21	21
Professional qualification		
ANM	46	46
GNM	46	46
Post basic	8	8

HSLC=High School Leaving Certificate, HS=Higher Secondary, ANM=Auxillary Nursing & Midwifery, GNM=General Nursing & Midwifery

Discussion

In the present study, researchers reported that there were low-level burnouts in emotional exhaustion and personal achievement; burnout in depersonalisation was moderate. In emotional exhaustion, 80% had low-level, 18% had moderate, and two per cent had high-level burnout. In depersonalisation, 39% had low-level, 38% had moderate, and 23% had high-level burnout. In personal achievement, 84% had low-level, 11% had moderate, and five per cent had high-level burnout.

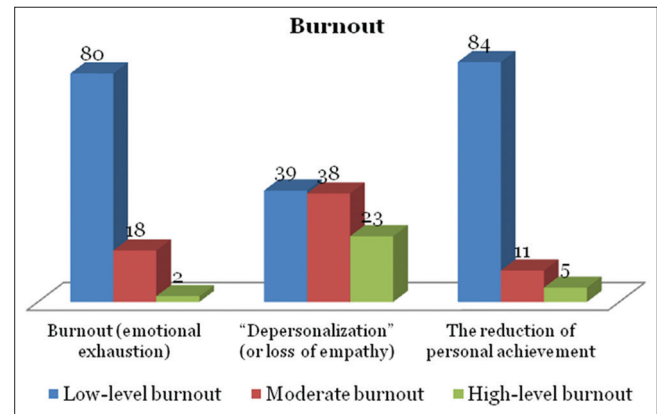


Figure 2: Percentage distribution of level of burnout of nurses.

Table 2: Mean, median, and standard deviation (SD) of level of burnout of nurses

Burnout	Mean	Median	SD
Emotional exhaustion	10.66	10.000	8.527
Depersonalisation	7.43	7.000	6.217
Personal achievement	43.25	44.000	5.260

Table 3: Burnout levels of nurses

Burnout	Low-level burnout	Moderate burnout	High-level burnout
Emotional exhaustion	80	18	2
Depersonalisation	39	38	23
Personal achievement	84	11	5

A similar study was conducted by Thorsen *et al.*[3] among 101 staff nurses working in Obstetrics and Gynaecology department at a referral hospital in Malawi found nearly three quarters (72%) reported emotional exhaustion, over one third (43%) reported depersonalisation, while almost three quarters (74%) experienced reduced personal achievement.

The present study finding of 80% low-level, 18% moderate, and two per cent high-level burnout in emotional exhaustion is supported by another study conducted by Bagaajav *et al.*[12] in Department of Social Sciences and Humanities, School of Public Health, Health Sciences University, Mangolia that found nurses had higher burnout rates, with personal, work-related, and client-related average scores of 45.39, 44.45, and 32.46 respectively.

In the present study, researchers found that in personal achievement, 84% had low-level, 11% had moderate, and five per cent had high-level burnout. This study finding is supported by another study conducted by Al-Turki *et al.*[13] in Saudi Arabia among 510 nurses. The result showed that 45% (89) had high emotional exhaustion and 28.9% (57) had moderate suffering with emotional exhaustion. The frequency of depersonalisation was 83 (42%) and was graded as high and 61 (30.8%) were moderately affected. Personal accomplishment was moderate to low in the majority of the nurses (71.5%). Authors found that majority of the nursing staff at the hospital were in a state of burnout with high frequency of emotional exhaustion and depersonalisation. Only a quarter of the surveyed staff felt that they had some level of personal accomplishment.

Rouleau *et al.*[14] conducted a study in Senegal among 226 midwives from 22 hospitals. Result showed very high levels of emotional exhaustion (80%) and depersonalisation (57.8%), and low level of personal accomplishment (12.4%). This similar study supported the present study findings where researchers found that in emotional exhaustion, 80% has low-level, in depersonalisation, 38% had moderate-level, and in personal achievement 80% had low-level burnout.

Limitation

In the study, sample was selected purposively from the entire population.

Implication

Conceptualising the nature of job stress in terms of its components can help nurses to understand that these stressors are inherent part of occupation. Such awareness may be useful to cope more effectively and prevent burnout. Research activities in the area of occupational burnout are of special significance in present times when the entire society at large is rapidly changing. The post modern era is the era of competition. The concept of the 'survival of the fittest' particularly holds true in today's complex context. With rapid globalization of nursing services and more trans-cultural issues crawling in coupled with complexities of modern life, more occupational burnout issues are likely to come to forefront.

Recommendation

Based on the study findings, the following recommendation is made:

Similar study may be replicated on a large sample which may help to draw conclusions that are more definite and can be generalised to a larger population. Thus, there is a need to repeat the study at large scale.

Conclusion

In the present investigation work it has been observed that occurrence of burnout is common among nurses. Nursing is acknowledged to be stressful work, and there is a need to understand the nature of that problem and to better manage it.

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Source of support: Nil. Declaration of interest: None.