Assessment of burn-out among staff nurses working in a tertiary care health centre in North India

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ABSTRACT

Background: This descriptive, cross sectional study identified the occurrence of burnout and some associated factors among nurses working in various departments at Indira Gandhi Medical College, Shimla, Himachal Pradesh, India which is a tertiary care health centre in the state.

Methods: A total of 257 nurses screened in the hospital out of which 81 completed the study. Eighty-one nurses answered a self-administered questionnaire (sociodemographic aspects, working conditions, and Maslach Burnout Inventory). Mean scores were compared using ANOVA test. Student T-test was applied to compare mean scores between the groups.

Results: All the participants were females (100%), with up to five years’ experience. High levels of emotional stress (45.7%) and depersonalization (24.7%) were identified, as well as low professional fulfilment (6.2%), and 8.6% presented burnout. The following factors were associated: high levels of emotional stress and always perform tasks very quickly (p=0.04) and receiving a salary incompatible to the effort employed (p=0.03); high levels of depersonalization and with up to five years’ experience (p=0.02) and often perform tasks very quickly (p=0.008). For 19.0%, at least two of the three dimensions pointed to high propensity to the syndrome.

Conclusions: Searching for personal solutions for work problems must draw our attention, since it discourages health and work performance. Professionals may feel more fulfilled and satisfied by adjusting their work expectations. However, on a long-term basis, persisting in stressful work conditions enhances emotional exhaustion, depersonalization and feelings of low fulfilment at work.

Keywords: Burnout, Nursing professional, Occupational health

INTRODUCTION

The term ‘Burnout’ was first utilized by Herbert Freudenberger in 1970s to the state of tiredness, exhaustion and failure in the institutional social workers.¹ Burnout syndrome is increasingly being recognized as modern day epidemic and has therefore lead to the demand for urgent action. Though it is an elusive thing to describe, still the most widely accepted definition is the sustained response to the constant and chronic job stress on the individual involving three key dimensions. These include the feeling of emotional exhaustion, negative response and attitude toward the users termed as depersonalization and feeling of professional failure and little accomplishment in life.² It is a physiological and psychological response which may get triggered when the employees are exposed to a stressful job environment involving long working hours, unrealistic expectations, inadequate resources, and low monetary compensation.
This is evident when an individual is unable to cope with the job-related stress effectively.3,4

Professionals such as health personnel that have frequent contact with other individuals are more prone to develop burnout syndrome. Among the health professionals, nursing personnel have been considered highly susceptible to work related stress. Long working hours, too much work load, inter-professional conflict, high expectations of health care seekers, task ambiguity and lack of supervision have been proposed as major contributors to this stress.5

Though a much prevalent problem among health personnel; not much researched material regarding burnout is available in the state, where study has been carried out. As there is a lack of region specific data and dearth of studies, policies required for dealing with this syndrome are also missing.6 With this background, the present study was conducted to measure the extent of burnout syndrome among the nurses working in a tertiary care hospital of Northern India.

METHODS

Study area

The study was conducted among nurses employed in Indira Gandhi Medical College Shimla, Himachal Pradesh; which is a tertiary health care facility.

Study population

This was a descriptive analytical cross-sectional study. The study participants included nurses working in different wards of the tertiary care hospital.

Study period

The study was conducted over a period of three months from January to March 2018.

Study sample

A total 257 nurses screened in the hospital out of which 81 completed the study. The nurses were distributed among different wards depending upon requirement, work load and number of beds available. Considering a prevalence of 5% based on previous available literature, 5% acceptable margin of error, 95% confidence limits and 10% non-response rate; a sample was computed. Further, proportionate sample from different wards was taken for the study purpose.

Inclusion criteria

- Nurses who gave consent to take part in the study.
- Nurses who were employed for at least one completed year.
- Questionnaires with more than 70% responses were included.

Exclusion criteria

Those who refused to participate in the study.

Study tool

A 22 itemed, self-administered, closed ended, anonymous questionnaire based on Maslach Burnout Inventory-Human Services Survey (MBI-HSS) was used for data collection.7 This questionnaire assessed three components of burnout namely, Emotional exhaustion (7 item), Depersonalization (7 item) and Personal accomplishment (8 item). These 22 questions were divided into three subscales to measure the three components of the burnout distinctly. These items were written in the form of statement about personal feelings and attitudes and answered on a 7-point scale from 0 as never to 6 as daily.

Statistical analysis

Data was entered in Microsoft Excel spreadsheet and transferred to Epi info version 7.2 Descriptive statistics were presented in the form of mean scores ± standard deviations. Discrete variables were presented in percentages and proportions of each. Mean scores were compared using ANOVA test and further Tukey Post hoc test was applied to compare any two individual groups (classes). Student T-test was applied to compare mean scores between two groups. P value <0.05 was taken as statistically significant. Two tailed significance tests were used for all analysis.

RESULTS

Nurses enquired were all females (100%), with a mean age of 27.5 years. Approximately 66.5% had up to five years in the profession; 53.3% worked in paediatrics and 50.6% were experts in their working area. A percentage of 41.3% were working two different jobs and 81.6% were responsible for more than five nursing/administrative tasks within the service: performing hospital care tasks (95.2%), under-graduate program teaching (47.6%), clinics care (23.8%), and research (23.8%). Around 71.0% worked night shifts routinely.

Majority (45.7%) of the professionals presented high levels of emotional exhaustion, 24.7% presented with depersonalization and 6.2% demonstrated low levels of personal fulfilment at work. Those with medium levels of emotional exhaustion and depersonalization were high in proportion. About 63.6% of nurses demonstrated at least one of the three dimensions indicating a high bias towards burnout, while 24.0% presented at least two of the three dimensions, pointing to a high bias towards the syndrome. About 8.6% presented all the dimensions associated with burnout (Table 1).
Table 1: Level of the three dimensions in the Maslach Burnout inventory and occurrence of burnout among nurses in a tertiary care hospital.

| Dimensions                  | Number (n=81) | Percentage (%) |
|-----------------------------|---------------|----------------|
| **Emotional Exhaustion**    |               |                |
| Low                         | 18            | 22.2           |
| Medium                      | 26            | 32.1           |
| High                        | 37            | 45.7           |
| **Depersonalization**       |               |                |
| Low                         | 12            | 14.8           |
| Medium                      | 49            | 60.5           |
| High                        | 20            | 24.7           |
| **Personal fulfillment at work** |           |                |
| Low                         | 5             | 6.2            |
| Medium                      | 10            | 12.3           |
| High                        | 66            | 81.5           |
| Burnout                     | 7             | 8.6            |

Regarding the burnout dimension emotional exhaustion, nurses felt burned out after work every day (15.6%) and a few times per week (20.6%). A few times per year, they felt disappointed with their work (36.3%), tired of working every day dealing with people (39.5%), frustrated about work (35.8%) and at the edge of their abilities (36.7%).

Regarding depersonalization, these professionals felt that patients blamed them for their problems every day (5.5%) and a few times per week (14.1%). A few times per year (28.4%) and once a month (25.7%) they felt they were harder towards people. A few times per year (26.5%) they felt hardened emotionally. A few times per year, 24.4% nurses felt patients blamed them for their problems; 87.4% never lack emotions towards the people they provided services to and never treated people as impersonal objects (67.3%).

None of the nurses answered "never" to questions regarding personal fulfilment at work. A few times per year (15.5%) and once a month (7.8%) they felt energetic at work. Once a month they felt stimulated after working with people (14.6%), created a favourable environment at work (18.8%), dealt easily with emotional problems (17.4%) and accomplished important things at work (13.8%).

A significantly larger proportion of professionals who frequently performed their tasks too quickly and those who considered their salary below the efforts they employed presented high levels of emotional exhaustion. There is a tendency towards a higher percentage of female professionals, with up to five years in the profession, who demonstrated high emotional exhaustion. We observed that having up to five years in the profession and performing their tasks frequently/always too quickly were associated with high levels of depersonalization (Table 2).

Table 2: Level of the three Burnout dimensions, according to gender, time in the profession, working conditions and rewards among nurses in a tertiary care hospital.

| Variables                              | Emotional Exhaustion | Depersonalization | Personal fulfilment |
|----------------------------------------|----------------------|-------------------|---------------------|
|                                        | Low (%) | Medium (%) | High (%) | P     | Low (%) | Medium (%) | High (%) | P     | Low (%) | Medium (%) | High (%) | P     |
| Gender                                 |         |           |          |       |         |           |          |       |         |           |          |       |
| Male (n=0)                             | -       | -         | -        | 0.9   | -       | -         | -        | 0.82  | 0       | 0         | -        | 0.87  |
| Female (n=81)                          | 15      | 32.4      | 52.6     |       | 12      | 58.3      | 29.7     |       | 5.6     | 12.2      | 82.2     |       |
| Time in the profession (years)         |         |           |          |       |         |           |          |       |         |           |          |       |
| 1-5                                    | 18.3    | 23.4      | 58.3     | 0.09  | 4.4     | 65        | 30.6     | 0.006 | 4.6     | 13.6      | 81.8     |       |
| >6                                     | 25      | 45        | 30       |       | 35      | 45        | 20       |       | 5       | 5         | 90       |       |
| Frequency with which tasks are performed too quickly |         |           |          |       |         |           |          |       |         |           |          |       |
| Never/sometimes                        | 34.2    | 39.5      | 26.3     | 0.01  | 30.3    | 56.4      | 13.3     | 0.009 | 0       | 8.6       | 91.4     |       |
| Frequently/always                      | 12.4    | 25.2      | 62.4     |       | 5       | 60        | 35       |       | 7.4     | 12.4      | 80.2     |       |
| Perform different functions in the service |         |           |          |       |         |           |          |       |         |           |          |       |
| Yes                                    | 16.3    | 27.3      | 56.4     | 0.2   | 10.7    | 56.7      | 32.6     | 0.6   | 8.8     | 16.2      | 75       |       |
| No                                     | 26.7    | 34.5      | 38.8     |       | 19.6    | 61.4      | 19       |       | 0       | 4         | 96       |       |
| Compatibility salary                   |         |           |          |       |         |           |          |       |         |           |          |       |
| Yes                                    | 75      | 25        | 0        | 0.01  | 25      | 75        | 0        | 0.5   | 0       | 0         | 100      |       |
| No                                     | 17      | 30.5      | 52.5     |       | 13      | 57.6      | 29.4     |       | 5       | 12        | 83       |       |
| Possibility of professional growth     |         |           |          |       |         |           |          |       |         |           |          |       |
| Yes                                    | 23      | 31        | 45       | 0.3   | 15      | 62        | 21       | 0.1   | 2       | 11        | 86       |       |
| No                                     | 8       | 25        | 66       |       | 8       | 41        | 50       |       | 16      | 8         | 75       |       |
None of the nurses answered "never" when asked about how often they had enough time to accomplish all their work tasks and how often they performed them less quickly. There was no statistical association among the three burnout dimensions and the following variables: work area, number of places worked in, overlaid care levels, working hours and time allotted to accomplish tasks.

All three professionals who experienced burnout were women: two had up to five years in the profession; two worked in the gynaecology and obstetrics area; one performed different functions within the same care service; two stated they had enough time to accomplish their tasks a few times; two were connected to two different health care services; all of them always performed their tasks wisely and considered their salary incompatible with their work performance. A tendency towards burnout was observed among nurses who had no expectations of professional growth (p=0.08).

**DISCUSSION**

Despite the low frequency of burnout among the study nurses, the high levels of emotional exhaustion and depersonalization found indicate an inclination towards developing the syndrome. The proportion of nurses with high levels of emotional exhaustion (45.7%) and depersonalization (24.7%) was observed in this present study. The negative consequences of burnout begin with tiredness and continued physical and mental stress, leading the professional to emotional exhaustion. When trying to overcome adverse situations, the gradual tendency to ignore personal needs, together with the denial of problems and repression of conflicts, may cause negative emotions and attitudes related to work. Burnout occurs when emotional exhaustion and depersonalization are overlaid, leading to lack of feelings of fulfilment at work.

In this present study, a gap between salary and efforts leads to the perception of lack of appreciation of their dedication. The challenge of the tasks that need to be done and available time to perform them subjected workers to extreme tension, especially considering the responsibility of performing as a professional, increasing fatigue, emotional stress and chronic exhaustion. However, exhaustion was not the only negative event resulting from the pressure of time, negative feelings and attitudes at work that characterize depersonalization; exhaustion was also more prevalent among nurses who frequently needed to act quickly in performing their tasks. The character of the relationship between the pressure of time and burnout impacts workers’ health more and more. A tendency to display high levels of emotional exhaustion was identified among women and among those with less time in the profession-these groups also demonstrated significantly higher levels of depersonalization, demonstrating consonant features with national and international studies. The high concentration of exhaustion and negative feelings and attitudes related to work among those who have less time in the profession is associated with being unable to accomplish tasks according to expectations and to the difficulty in envisioning possibilities to improve working conditions. Those with more time spent in the profession also feel emotional stress and tiredness; however, to maintain optimism, they continue to wait and hope for a solution, perhaps because they feel more complacent or can extract positive aspects out of negative experiences.

Predominance of females in the present study is congruent with the fact that choosing nursing as a profession is more frequent among women. Many arguments have been used to support the conclusion that women are more vulnerable to burnout than men. First, the role attributed to gender in the socialization process, where women tend to get more emotionally involved with the problems of people who they provide care for, may make women more vulnerable to burnout. Second, women have a higher probability of choosing professions involving more direct contact with people. Third, they are subjected to a double work standard (taking care of the home and their professional performance). Fourth, women use denial and repression as basic defence mechanisms: they deny or tend not to perceive their frustrations, negative feelings and exhaustion, always believing they can surpass their own limitations in each of the multiple roles they perform in life.

**CONCLUSION**

The ambivalence regarding the experience of work cannot be overemphasized since, even under unfavourable conditions, work can produce some degree of satisfaction. Such complexity of interactions that can be sources of both pleasure and suffering increase the need for diversification of strategies to deal with emotional stress and satisfaction as a fundamental element to promote quality of life at work. Therefore, dealing with burnout may emphasize either individual or organizational processes that better support team work and the health of its members.

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