



ORIGINAL RESEARCH PAPER

Nursing

EFFECTS OF OCCUPATIONAL STRESS AND BURNOUT ON WORK EFFICIENCY AMONG NURSING PROFESSIONALS IN IGIMS, PATNA

KEY WORDS: Burnout, Effect, Occupational stress

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ABSTRACT

A non experimental descriptive research design study was conducted in December 2018 to assess the effects of Occupational stress and burnout on work efficiency among 122 Nursing professionals of IGIMS, Patna selected through Non Probability Convenience Sampling technique. Jobs Demand- Resources model and Maslach Theory of Burnout was adopted as conceptual framework. Reliability of the tool was 0.93 found to be excellent.

Results: The major findings of the study showed that maximum effect of Occupational stress and burnout level on work efficiency of Nursing professionals was moderate (91%), 6.55% severe, and 2.45% as mild. The overall mean effect of Occupational stress and burnout level on the work efficiency of the Nursing professionals was 141.04 and SD of 28.84 respectively. There was no significant difference between the mean score among the respondents with respect to independent "t" test regarding Sex, Marital status, Spouse working, Licensing, Professional Qualification, Nature of Working, Family type on the effect of Occupational stress and burnout on the work efficiency of Nursing professionals at $p > 0.05$ while no significant difference was found regarding Age, Religion, Designation, Working area, shifts and hours, Monthly income (₹), Employment status, Job experience (years), District, Number of dependents on the effect of Occupational stress and burnout on the work efficiency of Nursing professionals using ANOVA at $p > 0.05$. Hence null hypothesis was accepted. Highly significant association was found between effect of Occupational stress and burnout on the work efficiency of Nursing professionals with demographic variable "Designation." Calculated Chi-square (χ^2) value at $p < 0.05$ rejected the null hypothesis.

Conclusion: The study concluded that maximum Nursing professionals of IGIMS had moderate effect of Occupational stress and burnout on their work efficiency which can be addressed efficiently in the long run.

INTRODUCTION

India being a developing nation is faced with health problems like stress and burnout. Globalisation and rapid industrial growth in the last few years have resulted in the emergence of occupational health related issues. Stress and burnouts indicates that these factors not only affect the level of performance, but also their job satisfaction and ultimately their own health.¹

Healthcare profession in its own is a socially responsible job where people expect prompt and caring behaviour, cooperative approach and positive attitude. Hazardous impacts were brought by job stress not only on Nurses' health but also in their abilities to cope with job demands, as was found through the researcher's experience. This seriously impairs the provision of quality care and the efficacy of health services delivery. Numbers of studies have identified Nursing as a stressful occupation. Stress has its own cost for individuals in terms of health, wellbeing, and job satisfaction, as well as for the organization in terms of absenteeism and turnover, which in turn may impact the quality of patient care.²

Nursing profession is currently undergoing several changes and scarcity of nurses in the health care industry due to high work pressure, poor HR (Human Resource) practices, nature of job and lack of facilities at workplace, organisational and educational changes, health care including high care technology, shortened lengths of stay in the hospital, emphasis on cost effectiveness, staff downsizing are all changes happening rapidly which are affecting the nurse's work environments. The constant pressures and fears of doing well, flexibility and responsibility creates self - imposed demands on the nurses.^{2,5}

Tabangcora Iris Dawn (2016) in her article on Nurse Burnout: 8 ways to manage work stress states "Nursing profession is most focussed on advancing the profession to take better care of clients. While this is admirable little has been made concrete to address the welfare of the Nurses." According to WHO only 15% workers worldwide have access to occupational health services which include health & safety at work. On a daily basis, Nurses deal with stressful situations that not only put a strain on their physical bodies but also to their psyche. This challenges the Nurses' ability to cope well.³

BACKGROUND OF THE STUDY:

Today's dynamic world has brought so many unwanted events among professionals which can be considered as the potential source of occupational stress. Occupational stress is the most powerful hazard in the hospitality industry. There is a significant relation between occupational stress, ill health and organizational commitment. Authors found out that organizational stressors contributed significantly to ill health and low organizational commitment which directly affect the employees' willingness to work (Viljoen and Rothmann, 2009). One of the major causes of Nurses' job stress is recognized as work-family conflict, low flexibility in job hours and high job demand creating significant occupational stress among Nurses working in hospitals (Pal and Saksvik, 2008). Two important stressors: psychosocial condition of the employee and stressful working condition attributed by physical facilities as well as management systems applied in the organization have significant influence on employees' job stress (Kopp, et. al., 2008).²

Occupational stress is a sort of negative stress. Occupational stress and stressful working conditions have been linked to low productivity, absenteeism and increased rates of accident on and off the job and sometimes leads to major psychological and psychotic disorders.^{4,5}

WHO stated that a healthy job is "likely to be one where the pressures on employees are appropriate in relation to their abilities & resources, to the amount of control they have over their work & to the support they receive from people who matter to them." It is acknowledged by National Occupational Safety Association of America that Nursing job is a stressful occupation.³

Some individuals thrive in the time urgent pressure cooker of life in the fast lane, having to perform several duties at the same time & a list of things to do that overwhelms most of us. Stress is a highly personalised phenomenon & can vary widely even in identical situations for different reasons. The severity of job stress depends on the magnitude of the demands that are being made and the individual's sense of control or decision making latitude in dealing with them. An estimated 1 million workers are absent every day due to stress. If this occurs in key employees it can have a domino effect that spreads down the line to disrupt scheduled operations.⁶

Occupational stress suggests that, job stress results from job features that pose a threat to the individual, due to either excessive job demands or insufficient supplies to meet the employees needs or when job requiring too much work in too short time (treadmill syndrome), there exists job overloading. Supply deficits concern things, employees expect from their job: adequate salary, job satisfaction, promotion of growth in job (Rice, 1992).¹

Burnout is a state of physical & emotional exhaustion due to long term stress in job or when working in a physically or emotionally draining role for a long time. Might also occur when ones efforts fail to produce the expected results and are left disillusioned. Burn out symptoms are varied and list comprehensive with the possibilities of feeling that everyday work is a challenge, remain exhausted much of the time, feel no joy or interest in work, or even feel depressed with it, feel weighed down by responsibilities, have less patience with others than used to have, feel discouraged about life or work, experience physical symptoms. Recovery from burnout is a slow process and doesn't go away on its own until one addresses the underlying causes causing it. Burnout at earlier career is easier to recover than if it's caused at the later stage in life.⁷ Among health professionals, Nurses are the ones who experience the most stress and Occupational Burnout syndrome.⁸

NEED OF THE STUDY:

Nursing, though considered a noble profession, is quite stressful and challenging in India, as the Nurses are the most undervalued staff despite their round-the-clock services to patients with intense health and emotional needs. This in turn hampers their will to perform, leading to huge burnout, job dissatisfaction as evidenced by several studies.⁹

The nature of the work of health professionals in which Nurses, physicians and hospital administrators are involved in providing help to people experiencing life crises, contributes to the higher level of stress in health service (Tyson and Pongruengphant, 2004). Workload, lack of managerial support and threats, lack of incentives and job security, violence and bullying has been reported to be the major sources of work related stress (Paul, 2013). Nursing staff are severely influenced by interpersonal conflicts with other staff members which are considered to be the biggest source of work place stress. Conflict with patients and their family members, duty doctors, other departments' employees and supervisors & colleagues are among major sources of workplace stress for healthcare employees (Hirokawa, et. al., 2012). Nursing profession cannot stay away from the situation of patient. Nurses have to engage with patients physically and emotionally, caring after them, sharing problems and having empathy (Fathi, 2003).²

Everyday Nurses confront stark suffering, grief and death in a way that few other people do. A study comparing occupational stress among Nurses and non- Nurses reveals that Nurses encounter significantly more stress factors than their non- Nurses colleagues. In turn these conditions may lead to poor work performance & can affect patient safety. Grñkjçr Lea Ladegaard (2013) writes that Wheeler identified a wide range of stressors for Nurses, including work overload, role conflict and ambiguity, resource shortages and pressure from patients & management.³

Burnout is characterised by a number of factors and not just one single symptom. Nurses have tremendous responsibilities and deal with enormous challenges as the role of Nurses is changing constantly from caregiver to a teacher to an advocate, communicator, decision maker, managers and leaders. Nursing is inevitably a demanding and stressful job in complex organisational setting. Extra stressors like burnout have a severe impact on Nurses' wellbeing, patient safety and the health organisation as a whole. National Health Service in England issued a report about Nurses leaving the profession due to occupational stress and inability to provide Nurse assessed good quality care. According to WHO, India alone needs 2.4 million Nurses. More Nurses in the world are needed and yet some are contemplating leaving the profession intensifying the Nursing shortage problem thus putting strain on the working Nurses.¹⁰

The deteriorating healthcare service quality of hospitals also is majorly caused due to job stress among Nurses working in private hospitals (Shader, et. al., 2001). Through an empirical study on Nurses working in private hospitals it was concluded that, private hospitals are more prone to job stress and burnout among Nurses (Lwin, Cheerawitratanapan and Orapinlaosee, 2015). The study also figures out that experienced Nurses are under more stress than new entrants in small healthcare units as the management expects multi-functional job performance. Senior Nurses are expected to deliver more than their core function, i.e., care to patients including lower management, maintenance, managing junior Nurses, etc. Study also reveals that due to seniority, senior Nurses have greater autonomy of work. As a consequence, they are more prone to occupational stress as they themselves feel accountable for proper management of work (Nabirye, et. al., 2011).²

Tabangcora Iris Dawn (2016) says one major detrimental effect of burnout in Nurses is increased occupational hazards in the hospitals. "Code blue for Nurses" means subjecting one's self to a constantly alarmed state as the mindset is always focussed on the idea that any second, the unit situation might go haywire. The job requires Nurses to be skilful in handling emergencies in the least possible time, the pressure being able to take care of it right and safely which is overwhelming. The thought of possible future attacks of burnout is unbearable, & Nurses crane their necks and stand on their toes in anticipation that they could press the code button for themselves.³ This leads to high employee turnover in the profession resulting in overload on remaining Nurses, and this vicious cycle impacts the service delivery of health care, in turn, degrading patients' outcomes (Chou, Li and Hu, 2014).²

Stress in Nurses is an endemic problem.¹¹ The Nurses in the research studies described their managers as not being particularly helpful, stating that they listen and are aware of what is happening, but do not empathise the anxiety or stress experienced by the Nurses. This is unfortunate because manager involvement might provide a supportive & healthy environment with positive feedback and support in stress situations.⁵

Crucial attention has to be paid to modern Nursing working structures and organisation as this is necessary to understand the dynamics within the complex Nursing organisation.¹⁰ If we are capable of recognizing the stress level on the right time then we will be able to deal and take positive action eradicating the causes and reducing the stress level, or else it will become "distress" and create unhealthy physiological and psychological reactions.⁴ Still incipient, reviews on occupational burnout syndrome in Nursing continue without indepth analysis of the theme and its origin or triggering mechanism.⁸ Nonetheless, the findings of the study can be helpful for Nurse practitioners in both hospitals and Nursing home settings, Nurse educators and Nurse leaders in any settings who are interested in improving the Nurse's work environments.

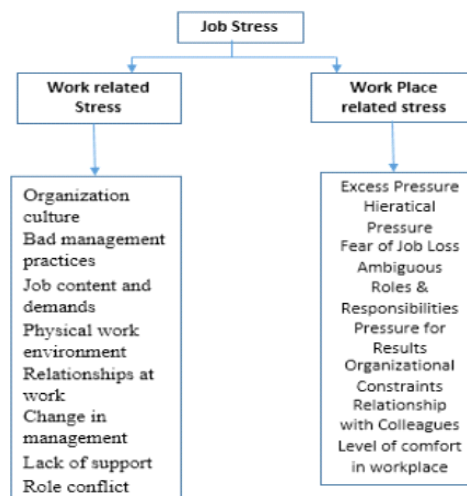


Fig 1: Different Types Of Job Stress ²

Table 1: Effects of Job Stress - can be physical, cognitive, emotional and behavioral. They are explained as follows:

Cognitive effects	Emotional effects
Memory problems	Depression or general unhappiness
√ Inability to concentrate	√ Anxiety & agitation
√ Poor judgement	√ Moodiness, irritability or anger
√ Seeing only the negative	√ Feeling overwhelmed
√ Anxious or racing thoughts	√ Loneliness and isolation
√ Constant worrying	√ Other mental or emotional health problems
Physical effects	Behavioural Effects
√ Headaches	√ Eating more or less
√ Diarrhoea or constipation	√ Sleeping too much or too little
√ Nausea, Dizziness	√ Withdrawing from others
√ Chest pain, rapid HR	√ Procrastinating or neglecting responsibilities
√ Upset stomach	√ Using alcohol, cigarettes or drugs to relax
√ Frequent colds or flu	√ Nervous habits (biting nails, pacing etc)

Source:<https://www.helpguide.org/articles/stress/stresssymptoms-signs-and-causes.htm>²

Table 2: Difference Between Stress And Burnout ¹¹

STRESS	BURNOUT
√ Characterised by over-engagement	√ Characterised by disengagement
√ Emotions are overactive	√ Emotions are blunted
√ Produces urgency & hyperactivity	√ Produces helplessness & hopelessness
√ Loss of energy	√ Loss of ideas, motivation and hope
√ Leads to anxiety disorders	√ Leads to detachment and depression
√ Primary damage is physical	√ Primary damage is emotional



Fig 2: The cycle of Nurse Burnout ³

OBJECTIVES:

1. Assess the effects of occupational stress and burnout on work efficiency in the Nursing professionals of IGIMS, Patna.
2. Find out the relationship between effects of occupational stress and burnout in the Nursing professionals of IGIMS with their work efficiency.
3. Analyse the relationship between effects of occupational stress and burnout in the Nursing professionals of IGIMS on work efficiency with the selected demographic variables.

HYPOTHESES:

H1: There will be significant difference related to the effects of occupational stress and burnout on work efficiency of Nursing professionals of IGIMS.

H2: There will be significant association between the effects of occupational stress and burnout on the work efficiency of Nursing professionals of IGIMS with the selected demographic variables.

Conceptual Framework: Based on Jobs Demand- Resources model and Maslach Theory of Burnout.

RESEARCH METHODOLOGY:

Research approach & Design: Quantitative, non experimental descriptive research design

VARIABLES:

Independent: Effect of occupational stress and burnout, **Dependant:** Work efficiency

Description of Tool:

Section I: Consisting of 19 items:- Demographic profile of Nursing professionals consisting of name, age, sex, religion, professional qualification, marital status, if married spouse working, designation, licensing, monthly income (₹), employment status, job experience (years), working hours, working shifts (in terms of more), nature of working, working area, family type, district and number of dependants.

Section II: Consisting of 58 Likert rating scale items compiled on effect of stress and burnout on work efficiency among Nursing professionals, partially adapted from Srivastava and Singh Occupational Stress Index and other miscellaneous sources.

The level of Occupational stress and burnout was classified and scored as: Mild (0 – 96), Moderate (97 – 193), Severe (194 – 290)

Validity & Reliability of the tool: Validity was done by a Psychiatrist. For the reliability Cronbach's Alpha test was used which was 0.933, found to be excellent.

Result and Discussion: Maximum 91% Nursing professionals had moderate Occupational stress and burnout followed by 6.55% as average and 2.45% having mild effect of Occupational stress and burnout on their work efficiency.

Table 3:Occupational Stress And Burnout On Work Efficiency Of Nursing Professionals

Occupational Stress and Burnout scores	Frequency	Percent (%)
Mild (0 – 96)	03	2.45
Moderate (97 – 193)	111	91
Severe (194 – 290)	08	6.55
Total	122	100

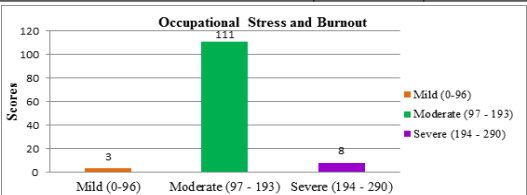


Fig 3: Bar diagram showing percentage distribution of effect of Occupational stress and burnout on work efficiency of Nursing professionals.

Table 4: Mean & S.D. of effect of Occupational stress and burnout on work efficiency of Nursing professionals.

N=122

Occupational Stress and Burnout scores	Mean	SD	Standard Error Mean
Mild (0 – 96)	89.67	3.51	2.03
Moderate (97 – 193)	137.82	22.98	2.18
Severe (194 – 290)	205	9.83	3.47
Overall	141.04	28.84	2.61

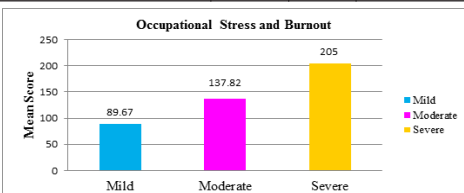


Fig 4: Bar diagram showing mean effect of Occupational

stress and burnout on work efficiency of Nursing professionals.

Table and Fig 4 indicated that there is a significant difference in the mild, moderate and severe effect of Occupational stress and burnout on the work efficiency of Nursing professionals of IGIMS.

DISCUSSION:

1.Effect of Occupational stress and burnout on work efficiency of Nursing professionals

The findings of the present study indicated that maximum 66% of Nursing professionals between age group 20 – 30 yrs, 80% each female & Hindus, 72% Diploma holders, 52% married with 59% spouse working, 88% licensed, 51% living in joint family with 48% having dependants less than 4, 39% having monthly income (₹) between Rs 15,000 – 35,000/-, 57% urban, 52% permanent, 87% Nursing officers and 72% having job experience less than 5 years, 42% working in ICU/CCU/OT, 82% working with more than 1 staff, 61% working in the morning shifts and 72% working for 8 hrs per day showed moderate effect of Occupational stress and burnout level on the work efficiency of the Nursing professionals of IGIMS.

Maximum 37% had to do a lot of work in the job, 53% had to "sometimes" have complicated adjusting owing to political/group pressures and formal rules & regulations, 48.4% stated higher authorities "never" care for the self respect, 46% & 52% said that they "never" got ample opportunities to utilise their ability & experience independently or to develop their aptitude and proficiency, 53.3% & 45.1% stated that there "never" existed sufficient mutual co-operation & team spirit among the employees of the organisation/department & that working conditions were "never" satisfactory from the point of view of their welfare & convenience, 43% had to "always" bear the great responsibility for the progress & prosperity of the organisation while feeling like drowning in the work, 39.3% said that they were "never" rewarded for their hard work and efficient performance, 41% had to "sometimes" dispose off their work hurriedly owing to excessive workload, producing more than usual; 46% said "sometimes" their some assignments are quite risky & complicated with unachievable deadlines, 35.2% said their opinions were "never" sought in framing important policies or changing/modifying the working systems and conditions of the organisation/ departments, 53.3% stated that "sometimes" it became difficult to implement all of a sudden the new procedures & policies in place of those already in practice, 34.4% stated that they were "sometimes" unable to carry out the assignments to their satisfaction due to excessive workload and lack of time, 39% each said that "sometimes" they have to do such work ought to be done by others and that they feel insecure, homesick, scared, anxious, mood changes, loss of temper, worthless, hopeless in life, forgetfulness, frustrated, restless, lack of confidence, pessimistic & nervous; 31.1% lost interest in hardwork "sometimes" owing to career pressure with no opportunity for career development, 38% "sometimes" had leg cramps, headache, trembling of hands, knees and feet with decline in social activities; 30% had tension due to increased competition "sometimes", 34.4% said owing to excessive workload they had to "always" manage with insufficient number of employees & resources, 48.4% said that they "always" understood that how their work fits into the overall aim of the organisation while a small fraction of 4.1% said that they "sometimes" had suicidal thoughts.

The overall mean effect of Occupational stress and burnout level on the work efficiency of the Nursing professionals was 141.04 and SD of 28.84 respectively. There was no significant difference between the mean score among the respondents with respect to independent "t" test regarding Sex, Marital status, Spouse working, Licensing, Professional Qualification, Nature of Working, Family type on the effect of Occupational stress and burnout on the work efficiency of Nursing professionals at $p > 0.05$ while no significant difference was found regarding Age, Religion, Designation, Working area, shifts and hours, Monthly income (₹), Employment status, Job experience (years), District, Number of dependents using ANOVA at $p > 0.05$. Hence null hypothesis was accepted.

This study was supported by various studies as follows:

A research study done by Nabirye, et. al. in 2011 conducted a research study whereby the results indicated that the senior Nurses are more prone to Occupational stress as they themselves feel accountable for proper management of work.²

Adzakpah Godwin, Laar Alexander, Fiadzoe Harrison S (2017) conducted a research study on Occupational stress among 73 nurses, the results of which revealed the most common stressors were workload, inadequate resources and conflicting demands.¹²

Miller Joan F (2011) in her research article on burnout and its impact on good working in Nursing whereby the study concluded that burnout is known to influence the retention, nurse's sense of moral cohesion and job satisfaction.¹³

A study undertaken by Laschinger Spence, Heather, Leiter Michael P (2006) concluded that patient safety outcomes are related to the quality of the nursing practice work environment and nursing leadership's role in changing the work environment to decrease nurse burnout.¹⁴

2. Association between effect of occupational stress and burnout on work efficiency of Nursing professionals with selected demographic variables:

The present study revealed that there is high association between demographic variable "designation" with the effect of Occupational stress and burnout on the work efficiency of Nursing professionals in IGIMS at $p < 0.05$. While no association was found between other demographic variables with the effect of Occupational stress and burnout on the work efficiency of Nursing professionals in IGIMS at $p > 0.05$. Hence, the result was highly significant at 5% level with respect to the demographic profile "designation" while not significant for other demographic variables. Hence null hypothesis was rejected.

This was supported by the study conducted by Fawjy Fawjy I, Wellisch David K, Pasnau Robert O, et al. (1983) on 57 female nurses whereby the results indicated that there was significant differences between demographic variables and in work related variables.¹⁵

IMPLICATIONS:

The findings of the study have valuable implications towards Nursing education, Nursing practice, Nursing administration and Nursing research. The Nurse educators can use the result of the study as an informative illustration for imparting education in an effective way related to various informations to reduce stress and burnout. Nursing practice requires maintaining calm and poise at the time of stress and burnout and efficient use of coping mechanisms to combat the same in the clinical field or work area in order to improve and raise the standards of output and patient care. The health care administrators should be able to motivate and initiate the health professionals in organising, conducting and participating in various educational programs contributing to better health care delivery system minimising and combating stress and burnout at the working field. The results can be used in the nursing field to prevent the occupational stress and burnouts among the nursing professionals in order to improve their working efficiency with a view to construct healthy mental faculties for better service to the clients. The results might be also used to address the needs of the nursing professionals risen due to the effects of occupational stress and burnout.

CONCLUSION:

The conclusion inferred, was that maximum 91% Nursing professionals had moderate occupational stress and burnout affecting the work efficiency. There is highly significant association between the effect of Occupational stress and burnout on work efficiency of Nursing professionals in IGIMS with the demographic variable of "designation".

RECOMMENDATIONS:

The study can be replicated in all the settings and professions with a larger sample.

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CONFLICT OF INTERESTS: The authors declared no conflict of interests.

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