



## ORIGINAL RESEARCH PAPER

## Management

### CAUSES AND EFFECTS OF JOB STRESS ON WORKING EFFICIENCY IN NURSING PROFESSION

**KEY WORDS:** Job stress, Nursing Profession, Coping Strategies.

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#### ABSTRACT

Healthcare profession in its own is a socially responsible job where people expect prompt and caring behavior, 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. The main object of the paper is to throw lights on causes and effects of Job stress and efficiency loss in nursing profession. The research suggests different coping strategies for nurses, which can help them to handle job stress and work efficiently for longer period of time.

#### Introduction

**Stress** is a state of psychological and physiological imbalance resulting from the disparity between situational demand and the individual's ability and motivation to meet those needs. Stress arises from various sources and means differently to different persons. We all experience pressure on a daily basis, and need it to motivate us and enable us to perform at our best. This is known as positive stress or **eustress**. However handling too much pressure without the opportunity to recover makes us experience negative stress or **distress**. In other words, we can say, when pressure comes without any opportunity to earn and learn, when things get on top of people or when one feels that he/she is unable to cope with demanding situation, individual starts feeling stress which is so called 'Job Stress'. Stress is a highly-personalized phenomenon and, it varies widely in individuals even in identical situations (The American Institute of Stress, 2016).

Another form of stress is 'Workplace Stress', about which majority of employees are unwilling to talk. There may be several reasons, but employees believe that they would be labeled as weak if they fail to attempt a situation. Stress is not a weakness and can happen to anyone. Workplace stress is the harmful physical and emotional response that can happen when there is a conflict between job demands on the employee and the amount of control an employee has over meeting these demands. In general, if there is high demand in a job and a low amount of control over the situation, it can lead to workplace stress.

The diversity in job stress origin is the main reason for variety of definitions. The *work stress is defined as, harmful physical and emotional response that occurs when job requirements do not match the worker's capabilities, resources, and needs*. It is therefore, considered as the biggest challenge to the individual i.e., physical, emotional, psychological, etc. for performing as per standards expected and a significant threat to the organization which has direct impact on organizational performance (ILO, 1986; National Institute of Occupational Safety and Health, 2004).

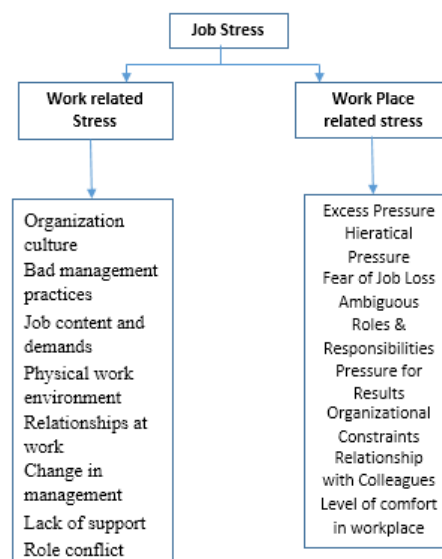
#### Types of Job Stress

In the current scenario, job stress has become too common among people working in corporate. After a long discussion among researchers, stress has been categorized into three categories viz., *Acute Stress*, *Episodic Stress* & *Chronic Stress*, depending upon its causes, symptoms and impact, as propounded by (Legg, et. al., 2016). **Acute Stress** is the most common type of stress. It relates to the immediate reaction of individual to a new challenge, event, or demand, and it triggers one's fight-or-flight response. It is a

situation oriented stress that may occur any time to anyone. Depending upon the type of personality of the individual, it may be positive or negative to the person. For instance, facing a new challenge in job may mean differently to different employees. For one, it may be an opportunity to learn and prove on new things to boss, but for another it may become a point of job stress.

**Episodic Acute Stress** is caused when an employee frequently experiences acute stress at work place. It is experienced by people who lag behind in technical and interpersonal skills and fail to cope with new job challenges and responsibilities. Such types of people always see the negative side of every change, are short-tempered and anxious in nature. They are usually pessimistic and tend to suffer from episodic acute stress.

**Chronic Stress** arises when acute stress isn't resolved and begins to increase or last for long periods of time. This stress doesn't go away and takes a constant shape. Stress arising out of new employee policy, change in working conditions, frequent transfers or job profile change etc. is few examples of chronic stress. Apart from psychological or medical definitions and types of stress, researchers have identified & classified job stress into two basic types i.e. *Work related stress* and *Workplace related stress*. It is represented diagrammatically:



## Review of Literature:

Today's dynamic world has brought so many unwanted events among professionals which can be considered as the potential source of occupational stress. Restructuring, reengineering, layoff and downsizing are that main characteristics of the uncertain environment which have threatened employees' personal security of employment (Huber, 1996). 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). The adverse effects of occupational stress on mental health of nurses due to the job demand and job Stress were identified. The study also found that 'Sense of Coherence' among male nurses was positively associated whereas in female nurses it is vice versa (Urakawa and Yokoyam, 2009). The occupational stress not only affects employees' physical as well mental health but it also increases employer's health cost significantly (Pollak, et. al., 2008). One of the major causes of nurses' job stress is recognized as work-family conflict. Work-family conflict, low flexibility in job hours and high job demand are the factors creating significant occupational stress among nurses working in hospitals (Pal and Saksvik, 2008). For the Indian sample, job stress was predicted by high family-work conflict and low social support in nurses and low job control in doctors. Two important stressors which have significant influence on employees' job stress have also been added. They are: psycho social condition of the employee and stressful working condition attributed by physical facilities as well as management systems applied in the organization (Kopp, et. al., 2008).

With the deep investigation by various researchers it was observed that there are differences in underlying causes/sources and triggers for everyone for job stress. However, some workplace factors are more likely to lead to stress, such as badly designed shift work, poor communications, bullying and harassment. 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). Hospital employees, specifically nursing staff are severely influenced by interpersonal conflicts with other staff members. It is considered as 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). Author also pin pointed that majority of hospitals are experiencing patient dissatisfaction and low revenue generation. Through the study, the author linked this situation with employees' dissatisfaction from job or workplace which arises through high job stress. 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).

Medical services are considered to be one of the most stressful profiles in private sector. If stress is not managed properly, it can cause physical as well as emotional illness (Schultz and Schultz, 1994). The nursing literature suggests that there is a range of interventions to help reduce stress in nursing. A recent review suggests that cognitive behavioral interventions and relaxation/meditation strategies are effective in reducing personal stress level (Brunero, 2006).

## Objectives of the Study

The current research is based on following research objectives:

1. To understand the sources or causes of job stress among nurses working in hospitals.
2. To study the effects of job stress among nurses working in hospitals.
3. To identify the coping strategies adopted by nurses to manage job stress.

## Research Methodology

Present study is based on secondary data, collected from the websites, articles and research papers published in reputed national & international journals, books, news article etc.

## Job Stress in Nursing Profession

The Healthcare profession in today's dynamic world is more demanding than ever which is a great stressor, as per a pro-longed research on occupational stress conducted (Cottrell, 2001). 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).

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). Occupational stress is also a significant issue which directly affects the health of nurses which results into risk of health as well as wellbeing of healthcare professionals. 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, Cheerawitratapan 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).

High expectation of job performance is leading to high level of occupational stress among employees. It has also been revealed by the study that there is an inverse proportionate between job stress and job performance. It means, when job stress increases job performance decreases and vice-versa. Moreover, job stress was found to be an important intervening factor for health care delivery because it could adversely affect employees' health and wellbeing as well as workers' burnout. 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).

## Causes of Job Stress in Nursing Profession

### Work Load

Work load at work place is a major source of job stress. Work load includes long working hours, work substitution, leave problem, non-nursing work assignment, extra duty etc. Job stress is the effect of tension on employees by the job pressure to fulfill job assignment and to respond to deadlines (Asad and Khan, 2003). Nurses are found under work pressure due to shortened staff at floor and increasing management as well as patients' expectations and frequently changing job demand. This may increase the level of job stress which may have adverse effect on nurse's performance. Work demand leads to mental sickness and increased work-life imbalance. In order to meet the job-related work load employees spend long working hours at work place which ultimately affects their work life balance (Salik and Kamal, 2007).

### Conflict at Work Place

Line and staff conflict is a very popular term in organizations but this concept is also familiar with hospital industry. Work place conflict is a major stressor which significantly affects stress level among nurses. Workplace conflict significantly increases the level of job stress and affects job satisfaction (Smith and Bourke, 2002). Workplace conflict comprises of negative arguments with immediate supervisor, conflict with colleague nurses, disappointment from physicians' behavior, dissatisfaction from management policies resulting in frequent conflict related to rules, job specification, job performance etc. Conflict at workplace not only affects an individual mentally but also has significant impact on physical activity;

### Organizational Decision

Organizational decisions derived from the organizational policies for operation and the Management brings in efficient working culture, integrity, synchronization among works between different departments. But these policies become potential source of job stress among employees when they do not follow reasonability in their intensity. Due to hard organizational policies, hard decisions come out for employees and this is the situation when organizational conflicts arise and convert into job stress and job dissatisfaction. It has been observed that inappropriate organizational decisions regarding job create stress among nurses working in different departments (Sahraian, et. al., 2008).

### Lack of Emotional Support at Workplace

Various researchers have identified that lack of emotional support at workplace increases the level of stress. In a situation where employees feel stressed and cannot find any emotional help from colleagues, their stress level significantly increases. Hospitals are very prone to such events because nurses are highly overloaded with work and are unable to find time to share things with their peers. It was revealed in a study that long working hours and depression among doctors causes occupational stress (Tomioka, et. al., 2011).

### Pay and Package

One of the potential reasons for job stress in almost every industry is pay and package. Majority of employees are found stressed due to low salary and package. Corporate houses offer lowest salary to their employees and do not follow the norms of government's minimum labor wage system and this may lead to high job stress. Apart from occupational stress this factor also causes different types of psychological states viz. lack of feeling of responsibility among employees, lack of family feeling at work place, offensive nature of work, lack of feeling of belongingness etc. In the long run, this may also lead to high attrition rate and high job dissatisfaction. It is evident from the literatures that fair salary package brings feeling of responsibility among employees. Well paid employees always feel positive for their work and give their 100 percent. In case of nursing profession, pay and packages is the biggest challenge before nurses. Nurses are highly underpaid and fully loaded with work. Timing is another issue with them, hence, it was observed that nurses are dissatisfied with their jobs certainly due to less salary offered to them as against high expectation of performance. It was found in a study that there is a variation in level of stress among nurses working in different departments of hospitals (Sahraian, et.al., 2008). A thorough investigation by the authors revealed that multiple reasons were responsible for stress among nurses and one among them was inappropriate salary offered to them. Three departments, viz. Surgery, Psychiatry and Burns ward had different causes of stress but one among them was common that was low salary & package offered. There was a mismatch between job requirement and remuneration.

### Dealing with Death and Dying

Nursing profession is full of diversified inherited nature of job which has significant negative impact on nurses' psychological state. One of the biggest innate negative aspects, i.e., bad part of job of nursing profession is dealing with death and dying situation of patient. During the job, nurses come across various disturbing happenings like patients' struggle with disease, death situation, accidental body, crying and grieving members of the patients' family and many more. Such situations put psychological impact on nurses' performance and create mental stress. Researchers found this factor a potential threat to nursing profession which creates emotional pressure on nurses and makes them unhappy with the job. These situations also lead to mental & physical disorders because one cannot handle the psychological pressure (Grusi and Moslemi, 2005). This factor as potential stressor in hospitals cannot be overlooked because it is innate in nature. However various studies reveal that the hospital management can help nurses to control & minimize stress through proper training and by teaching them coping strategies at workplace (Lashonda, 2004).

### Role Ambiguity

It refers to unclear role and responsibility at workplace. It is the lack of clarity on one's job profile which may create role conflict between two employees and result into many undesirable events viz., job dissatisfaction, conflicts, job stress etc. Due to role ambiguity, the employee remains confused about his or her role or tasks, caused by lack of required information, lack of communication of available information, or receipt of contradictory messages regarding the role. Role ambiguity occurs due to Role conflict. It refers to employee's incompatibility for different tasks in the same role. Role conflict often arises when priorities of one work or assignment come between other assignments. It is in such a situation that an employee feels role ambiguity. Role conflict and role ambiguity are the potential stressors, causing job stress, not only affecting one's performance, but also affecting the overall organizational competency (Richter, 2011).

### Inadequate Staffing

It is a burning problem to be solved in hospitals. Short staff always leads to job stress and job dissatisfaction, which in turn result into poor quality of healthcare services to patients. Negative staffing is again a major cause of workplace injuries and job stress. Wide range of healthcare service issues are encountered where nursing staff is inadequate including hospitals, nursing homes, and ambulatory and community-based environments. Nurses are exposed to a wide range of work-related hazards while performing their duties. Some evidences suggest that fatigue related to overwork and staffing patterns, including shift work, can also contribute to injuries and stress among staff providing nursing services (Gold, et. al., 1992; Phillips and Brown, 1992). Healthcare sector is identified as one of the highest employment generation sectors in India. Fast growing population, increase in more infectious diseases, ageing etc. have resulted in hyped demand for nurses and is putting extra load in workload form. The average population in U.S is expected to grow by 18% till 2020 as against the demand for healthcare professionals including nursing staff which would increase by 54% (Pascale and Ayse, 2008). This will result into a big gap between demand and supply which may create an adverse effect on healthcare employees' performance. The situation will surely lead to inadequate staffing and will increase the workload.

### Long Working Hours and Work in Shifts

The challenges of providing consistent services to patients around the clock, the healthcare units would definitely need a great pool of employees. Around the clock job requirement needs nursing staff to work in different shifts and this would create job stress in majority of nurses working in healthcare clinics and hospitals. Studies reveal that long working hours and working in shifts lead to various types of risks, occupational injuries and mental and physical illness among nurses. Scientific evidences prove that long working hours also increase the risk of short sleep duration, sleep disturbance and many other diseases. Chances of low performance, obesity, injuries, and a wide range of chronic diseases also increase because of long work hours and shift work. In addition, fatigue-related errors could harm patients and affect quality of hospitals' services. Fatigued nurses also endanger others during their commute to and from work. Nursing staff in facilities that operate around the clock are commonly exposed to shift work and long working hours. The need to sleep at irregular times and at times that are out of phase with circadian rhythms, can lead to difficulties in sleep because of such demanding schedules. This irregularity also creates work-life imbalance and job stress among nurses (Claire, 2013).

### Exposure to Hazardous Substances

Nursing is a uniquely hazardous occupation. It is a profession in which healthcare professionals are subject to varieties of illness due to exposure to various hazardous substances. Various studies have been conducted to determine or identify the major hazards which may be faced by nurses while on-the-job. Nurses confront potential exposure to infectious diseases, toxic substances, back injuries, and radiation. They also are subject to hazards such as stress, shift work, and violence in the workplace. These typically fall under the broad categories of chemical, biological, physical, and

psychosocial hazards (Pope, Snyder and Mood, 1995). Nurses are exposed daily to scores of different toxic chemicals and other hazardous materials whose cumulative health risks have never been studied. This was observed during a survey conducted over 1500 nurse. Nurses ingest, touch or breathe residues of any number of these potentially harmful substances as they care for patients, day after day and face potential but unstudied health problems as a result. Every day, nurses confront low-level but repeated exposures to mixtures of hazardous materials that include residues from medications, anesthetic gases, sterilizing and disinfecting chemicals, radiation, latex, cleaning chemicals, hand and skin disinfection products, and even mercury escaping from broken medical equipment (Truth Archives, 2007).

Effects of Job Stress

The effects of Job stress can be physical, cognitive, emotional and behavioral. They are explained as follows:

Cognitive effects	Emotional effects
<ul style="list-style-type: none"> <li>Memory problems</li> <li>Inability to concentrate</li> <li>Poor judgment</li> <li>Seeing only the negative</li> <li>Anxious or racing thoughts</li> <li>Constant worrying</li> </ul>	<ul style="list-style-type: none"> <li>Depression or general unhappiness</li> <li>Anxiety and agitation</li> <li>Moodiness, irritability, or anger</li> <li>Feeling overwhelmed</li> <li>Loneliness and isolation</li> <li>Other mental or emotional health problems</li> </ul>
Physical effects	Behavioral effect
<ul style="list-style-type: none"> <li>Headaches</li> <li>Diarrhea or constipation</li> <li>Nausea, dizziness</li> <li>Chest pain, rapid heart rate</li> <li>Upset Stomach</li> <li>Frequent colds or flu</li> </ul>	<ul style="list-style-type: none"> <li>Eating more or less</li> <li>Sleeping too much or too little</li> <li>Withdrawing from others</li> <li>Procrastinating or neglecting responsibilities</li> <li>Using alcohol, cigarettes, or drugs to relax</li> <li>Nervous habits (e.g. nail biting, pacing)</li> </ul>

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

The above mentioned chart illustrates the effects of stress. These effects definitely are of very serious nature. Therefore it is imperative for the Managements to make some interventions in the form of trainings (i.e. Time Management Training, Yoga & Meditation, Fitness Training, Soft Skill Trainings etc.) to the nurses in order to equip them well to reduce these impacts not only for their own mental and physical well-being but also for maximizing their output so as to achieve individual and organizational goals.

Stress Coping Strategy

Stress coping can be viewed as the process of modification in cognitive approach in constantly changing work environment and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person (Lazarus and Folkman, 1984). Coping is also referred to as a scientific mechanism involving a logical response to a situation characterized by uncertainty and important consequences (Latack, 1986). Furthermore, coping is illustrated as a process oriented, non-automated adaptive behavior, effort, and managing life stressors (Backer, et. al., 2000). Coping consists of all the things people do to control, tolerate or reduce the effects of life's stressors namely perceived threats, existing problems or emotional losses, according to (Lazarus 1984; Wade and Tavis, 2003). With these general definitions, coping can be best illustrated as managing taxing circumstances, expending efforts to solve life's problems and seeking to master or reduce stress (Burke and Weir, 1980).

There are various coping strategies which are commonly used by majority of healthcare employees in India. Some of the important coping strategies are:



Coping Strategies Adopted by Nurses Working in Hospitals

Conclusion

The current research tried to investigate, the causes and effects of Job stress on working efficiency. With reference to the researches, it is found that the nursing profession is experiencing scarcity of nurses. This scarcity of nurses in healthcare industry is the outcome of high work pressure, poor HR practices, nature of job and lack of facilities at workplace. These attributes are the major responsible factors for making this respectful profession, a stressful job. Further research exploring specific coping strategies for nurses to fight against job stress and keep their performance efficient.

The above research revealed that hospitals must take care of potential factors responsible for job stress among nurses in order to ensure quality of healthcare services offered to the patients. All the identified causes are controllable partially or fully. Hospital management must consider their employee nurses as valuable asset and do strategic asset management to keep it's worth forever. Hospitals deal in service product which is quite different from manufacturing product. If hospitals want to deliver best of quality services, they need to keep their employees happy and stress free.

Reference:

- Legg, T. et al. (2016). What's your stress type, Health line Blog- Written by Health line Editorial Team, Retrieved from: <http://www.healthline.com/health/whats-your-stress-type#Overview1>
- The American Institute of Stress,(2016). Retrieved from: <http://www.stress.org/workplace-stress/>
- International Labour Office (ILO) and joint WHO Committee on Occupational Health,(1986). Psychosocial factors at work: Recognition and control, Occupational Safety and Health, Series no. 56. December. ILO. Geneva. 81 p.
- National Institute for Occupational Safety and Health (NIOSH) (2004). Overtime and Extended Work Shifts: Recent Findings on Illnesses, Injuries and Health Behaviors, Centers for Disease Control and Prevention, U. S. Department of Health and Human Services, April. Publication no. 2004-143, pg. 49.
- Stress Symptoms, Signs, and Causes- Retrieved from <https://www.helpguide.org/articles/stress/stress-symptoms-signs-and-causes.htm>.
- Huber, D. (1996). Leadership and nursing care management, Philadelphia: W.B. Saunders Company.
- Urakawa, K. and Yokoyam, K. (2009). Sense of Coherence (SOC) may Reduce the Effects of Occupational Stress on Mental Health Status among Japanese Factory Workers, Journal of Industrial Health, Vol. 47, No. 5 pp.503-508.
- Viljoen, J.P., & Rothmann, S. (2009). Occupational stress, ill health and organizational commitment of employees at a university of technology. SA Journal of Industrial Psychology/SATydskrifvirBedryfsielkunde, 35(1), Art. #730, 11 pages. DOI: 10.4102/sajip.v35i1.730.
- Pollak, K., George, E. J., Bollash, A.M. and Linda S. Pescatello. (2008). Stress management in the workplace: A comparison of a computer-based and an in-person stress management intervention, Vol.24, Issue 2, pp. 486-496.
- Pal, S., & Saksvik, P. (2008). Work-family conflict and psychosocial work environment stressors as predictors of job stress in a cross-cultural study, International Journal of Stress Management, Vol. 15, No. (1), pp. 22-42.
- Kopp, Maria S; Stauder, Adrienne; Purebl, Gyorgy; Janszky, Imre; Skrabski, Arpad. (2008). Work stress and mental health in a changing society, European Journal of Public Health, Vol. 18(3), pp. 238-244.
- Hirokawa, K., Taniguchi, T., Tsuchiya, M., & Kawakami, N. (2012). Effects of a Stress Management Program for Hospital Staffs on their Coping Strategies and Interpersonal Behaviors, STAGES Industrial Health, Vol. 50, pp. 487-498.



13. Fathi, M. (2003). Incidence rate and sources of stress among nurses working in intensive care unit of Kourdistan university of medical sciences, Scientific Journal of Kurdistan University of Medical Sciences, Vol. 7(4), pp. 53-62.
14. Schultz, D.P. and Schultz, S.E. (1994). Psychology and work today: An introduction to industrial and organizational psychology, 6th ed. New York: Macmillan Publishing Company.
15. Brunero, S. (2006). Stress Management for Nurses, NSW Health- Book, ISBN: 0-646-45849-3.
16. Cottrell, S. (2001). Occupational stress and job satisfaction in mental health nursing: focused interventions through evidence-based assessment. Journal of Psychiatric and Mental Health Nursing, 8, 157-164.
17. Tyson, P. D., & Pongruengphant, R. (2004). Five-year follow-up study of stress among nurses in public and private hospitals in Thailand. International Journal of Nursing Studies, 41(3), 247-254.
18. Shader, K., Broome, ME., Broome, CD., West, ME., Nash, M. (2001). Factors Influencing Satisfaction and Anticipated Turnover for Nurses in an Academic Medical Center, Journal of Nursing Administration, Vol. 31(4), pp. 210-16.
19. Nabirye, R. C., Brown, K. C., Pryor, E. R., & Maples, E. H. (2011). Occupational stress, job satisfaction and job performance among hospital nurses in Kampala, Uganda, Journal of Nursing Management, Vol. 19(6), pp. 760-68.
20. Chou, L.P., Li, C.Y., Hu, S.C. (2014). Job stress and burnout in hospital employees: comparisons of different medical professions in a regional hospital in Taiwan, BMJ open, Vol. 4(2), e004185.
21. Salik, R. & Kamal, A. (2007). Occupational Stress, strain and coping strategies among people suffering from hypertension and people without hypertension, FWU Journal of Social Sciences, Vol. 1, pg. 39-51.
22. Asad, N. & Khan, S. (2003). Relationship between Job-Stress and Burnout: Organizational Support and Creativity as Predictor Variables, Journal of Psychological Research, Vol. 18, Vol. 3, Issue 4, Pg. 139-149.
23. Sahraian, A., Fazelzadeh, A., Mehdizadeh, AR., & Toobaee, SH. (2008). Burnout in hospital nurses: a comparison of internal, surgery, psychiatry and burns wards, International Nursing Review, Vol. 55, pp. 62-67.
24. Tomioka K, Morita N, Saeki K, et al. (2011). Working hours, occupational stress and depression among physicians, Occupational medicine (Oxford, England), Vol. 61, pp. 163-170.
25. Grusi Farshi, M., & Moslemi, M. (2005). Investigate the relationship between burnout and coping techniques Nurses Kurdistan province. Quarterly Journal of Psychological Studies, Vol. 1(4, 5), pp. 5-19.
26. Lashonda, L. (2004). Factors that most influence job satisfaction among cardiac nurses in an acute setting, USA. Marshall University.
27. Brunero, S., Cowan, D., Grochulski, A., & Garvey, A. (2006). Stress Management for Nurses. New South Wales Nurses' Association, Camperdown 1450, Australia.
28. Pascale Carayon & Ayse P. Gurses (2008). Nursing workload and patient safety, Retrieved from: <https://www.ncbi.nlm.nih.gov/books/NBK2657>
29. Richter, L. (2011). Role Ambiguity and Role Conflict in Job Satisfaction, Journal of Nursing Administration, Vol. 34, Jan-March edition.
30. Paul, B. (2013). Stress and Psychological Disorders in Great Britain. Health and Safety Executive, UK. Retrieved from: [www.hse.gov.uk/statistics/causdis/stress/](http://www.hse.gov.uk/statistics/causdis/stress/)
31. Truth Archives (2007). Illness in Nurses Linked to Hazardous Materials on the Job, Retrieved from: <http://www.truth-out.org/archive/item/75019-illness-in-nurses-linked-to-hazardous-materials-on-the-job>.
32. Claire C. C. (2013). Negative impact of shift work and long work hours, HHS Public Access, Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4629843>
33. Latack, J.C. (1986). Coping with job stress: Measures and future directions for scale development, Journal of Applied Psychology, Vol. 71 (3), Pp. 377-385.
34. Lazarus, R.S. and Folkman, S. (1984). Psychological stress and the coping process. New York: Springer.
35. Wade, C. and Travis, C. (2003). Psychology, 7th ed. New Jersey: Prentice Hall.
36. Backer, J.H., Bakas, T., Bennett, S.J. and Pierce, P.K. (2000). Coping with stress: Programs of nursing research. In Rice, V.H. (ed), Handbook of stress, coping, and health: Implication for nursing research, theory and practice. London: Sage Publications.
37. Burke, R.J. and Weir, T. (1980). Coping with the stress of managerial occupations. In Cooper, C.L. and Payne, R. (eds), Current concerns in occupational stress. Chichester: John Wiley & Sons.