Chapter - II
Review of Literature
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REVIEW OF LITERATURE

2.1. Introduction to research

The beginning stage of 20th century expanded the job horizon in various sectors for women in the world especially it gradually increased in our country. Among the dispersion of women employment in various sectors in India, the constitution is reasonably high in service sector. But the pie of employment and its growth is reasonably fair in hospital sector. The nature of hospital sector differs while compared to other sectors in terms of employment, time of work, outcome of job, its content, working conditions and so on, but women employment generates fair in this sector. But at the same time, it is the sector which witnesses the various issues, practices and outcome for women employment. Among these aspects, occupational stress is the prominent one. In order to understand the source and destination of occupational stress related issues, the reviews related to women employment, stress on women especially on nurse have been identified and critically evaluated in this chapter. The chapter consists of the following aspects of reviews as follows.

2.2. About hospital industry
2.3. About hospital industry as service sector
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2.2 About Hospital Industry

Gray-Toft and Anderson (1935)\(^1\) in their research study titled “Effectiveness of a counseling support program for hospice nurses” identified a model of organizational stress in the hospital. The model focused on organizational climate, supervisory practices, and work group relations as predictors of the amount of role conflict and ambiguity that nurses realized in providing patient care. Role conflict and ambiguity apart from other organizational variables also played a part in the level of stress that the nursing staff experienced. Nursing stress was viewed as a direct cause of dissatisfaction.

Friedson (1963)\(^2\) in his research article titled “The Hospital In Modern Society” noted in his preface to a group of studies on hospital that the virtues of the hospital for social scientists that are ubiquitous, varies widely and significantly in its characteristics. Hospitals also have captive audiences of patients who are in dependent positions and are vulnerable to research. The status of social scientists vis-a-vis organization personnel is probably higher in hospitals than in business and industrial settings.

Anderson (1980)\(^3\) in his research paper titled “A statistical cost function study of public general hospitals in Kenya” viewed the behavior of hospital costs in Kenya using a sample of 51 hospitals during 1975-76. The dependent variable was average cost per patient day. The explanatory variables were, capacity as measured alternatively by available and used beds, occupancy rate, average length of stay, number of outpatient visits per inpatient day, number of satellite ambulatory facilities operating under the hospital and the nature of hospital, provincial or non-provincial.

According to Tatchell (1983)\(^4\) in his research study titled “Measuring hospital output: A review of the service mix and case mix approaches” focused that a patient-day care may differ between hospitals, departments of the same hospital and over time, these differences may arise due to differences in (a) technology, (b) quality of care, (c) case-mix, (d) case complexity and severity, and (e) institutional characteristics (size, teaching status, location, composition, ownership etc). So the output of the hospitals need to be standardized in order to bring it to a comparable
form for measuring efficiency. Among the different methods of standardizing the output, service mix is the foremost available or the services and the procedures actually performed.

Bruce J. Eberhardt and Abraham B. Shani (1984) in their research work titled “The Effects of Full-Time Vs Part-Time Employment Status on Attitudes toward Specific Organisational Characteristics and Overall Job Satisfaction” discussed the perceptions of part-time employees in a medical rehabilitation hospital toward specific organisational characteristics and compared these attitudes and feelings of overall job satisfaction with those of full-time employees. The completed questionnaires assessed three group processes (trust, cooperation and power), job satisfaction and organizational climate.

According to McClure (1984) in her research article titled “Managing the professional nurse: Part-1. The Organisational Theories”, ask the question, how do organizations outside the hospital field deal with issues such as staff productivity, motivation, burnout, and high turnover? In Part-1 of this two part article, the author presents an overview of modern management theory and practice, drawn from the literature on organisational behaviour. She also expressed how nursing administrators can use this scholarly foundation to better understand the organizing principles and problems of their departments. In part-2, the author applies these classic and relevant theories to the specific challenges that face the manager of professional nurses.

Podsakoff et al (1984) in their research study titled “Situational moderators of leader reward and punishment behaviours; fact or fiction” reported here was to increase our understanding of the relationships between leader contingent and non-contingent reward and punishment behaviours and subordinate responses in hospitals. Contingent reward behaviour was found to have the most pronounced relationship with subordinate performance and satisfaction, followed by non-contingent punishment behaviour and the vice versa.

Mckinney M.M (1984) in his research study titled “The newest miracle drug: quality circles in hospitals” viewed that a number of hospitals throughout United States have been exploring the use of Japanese style quality circles to reduce
their operating expenses, improve productivity, and to enhance the quality of work life for hospital employees. When administrators believe in their employees’ ability to contribute to the Institution and are willing to invest necessary time and resources in employee education and the measurement of quality circle achievements, quality circles can produce creative solutions to perplexing institutional problems.

According to Madsen and Harper (1985) in their research article titled "Improving The Nursing Climate For Cost Containment" discussed on the steps that one can take in hospital setting to create an organisational climate conducive to implementing cost containment activities. One of the solutions in the hospitals was to broaden the role of its nurse managers, strengthen unit level problem solving and more creative use of existing resources.

Rodriguez and Jimenez (1985) in their research study titled “Comparative analysis of productivity in public and private Chilean hospitals”, conducted a comparative study of productivity between private and (decentralized) public Chilean hospitals. They measure the productivity in terms of inverse average length of stay (ALS), namely shorter the ALS, higher the productivity. The authors divided ALS into three components, namely diagnosis (D), medical treatment (T) and recovery (R) respectively. It was argued that while T must be performed within the hospital, D and R can partially be accomplished on outpatient basis. For a given patient-case-mix, the authors hypothesized that a series of individual specific variables, such as age and income can influence D and R. It was assumed that a patient's income is a close proxy of the type of health insurance or coverage he/she has. Thus, income was assumed to closely correlate with out-of-pocket price of the services and it influenced individual behavior, as measured by D and R. The type and severity of illness, and the amount of medical inputs provided to the patients, were also assumed to affect the D, T and R.

Fahrenfort (1987) in his study titled “Patient Emancipation by Health Education: An Impossible Goal” speaks of how the development of patient education in hospitals received its first impetus in the U.S. For this reason, countries like Netherlands where these developments tend to lag behind a bit look to U.S hospitals and literature for guidance on how to proceed in this matter. Given this
context, the difference in social, political and organisational climate between the Netherlands and the U.S, provides unique opportunities for classifying some of the issues that characterize the development of patient education.

Rudnick et al (1957)\textsuperscript{12} in their research work titled "The Direct Effect of Health Managers on Quality Control, Assessment, Assurance" observed that the midst of the many changes that are occurring in the health care industry, the aspect of quality remains as the same level at different outcome. In the past, efforts at quality control have largely focused on the offering of quality care beyond the clinical environment in the area of services. Additionally they observed how to enrich the organizational climate in which services are provided and measured the results.

Kenney (1990)\textsuperscript{13} in his research article titled “Social Work Management In Emerging Health Care Systems” presented an overview of the health care industry's trend toward multihealth system and specific adaptive strategies for social work managers in health care are suggested. The emergence of multi health systems possesses major challenges and unique opportunities to the social work profession. Awareness of managerial strategies and critical content areas can help social work leaders enhance the role and contribution of social work in these existing arid complex health care delivery systems.

Lewis et al (1990)\textsuperscript{14} in their study titled "Measuring Costs, Efficiency, and Quality in Public Hospitals: A Dominican Case" used cost accounting method to measure efficiency and quality of care at Aybara hospital, which is a 271-bedded government-run facility in the Dominican Republic. To estimate costs, the authors monitored a selected sample of patients during their treatment in the hospital, recording the cost of services provided to them The sample consisted of three sets of patients, (i) emergency patients, (ii) people consulting in an ambulatory basis, and (iii) inpatients admitted to five departments (3 surgical and 2 ophthalmology) of the hospital during a one-week reference period.

According to Wouters (1990)\textsuperscript{15} in his research work titled "The Cost and Efficiency of Public and Private Health Care Facilities in Ogun State, Nigeria", studied the cost and efficiency of a sample of 42 private and public health facilities in
Ogun State, Nigeria She analysed efficiency and cost by estimating production and cost functions respectively. Technical efficiency was assessed using the estimated production function and the associated measure of marginal product of health workers. She found that the efficiency variable was insignificant and thus concluded that departures from cost minimisation have little effect on expenditures. She also found that the marginal costs are less than average costs and thus concluded that facilities in her sample exhibit increasing returns to scale both for admissions and outpatient visits.

Eakin (1991)\(^{16}\) in his research study titled "Allocative Inefficiency in the Production of Hospital Services" studied the determinants of economic efficiency in hospitals. For this purpose, the estimated values of allocative inefficiency are regressed on several hospital and market-related characteristics considered to be the determinants of efficiency based on economic theory. The independent variables included ownership, regulatory factors, competitive factors, factors characterizing the sources of hospital revenue, measures of hospital size, and regional dummy variables.

Duggal R. (1994)\(^{17}\) in his research framework titled “Health care utilization in India”, on the utilization of health care in India, revealed that India has a plurality of health care systems as well as different systems of medicine. The government and local administrations provide public health care in hospitals and clinics. Public health care in rural areas is concentrated on prevention and promotion services to the detriment of curative services. The rural primary health centers are woefully underutilized because they fail to provide their clients with the desired amount of attention and medication because they have inconvenient locations and long waiting times.

Kelly J Devers et al (2003)\(^{18}\) in their study titled “Changes in Hospital Competitive Strategy: A New Medical Arms Race” described changes in hospitals’ competitive strategies, specifically the relative emphasis on strategies for competing along price and nonprice (i.e., service, amenities, perceived quality) dimensions, and the reasons for any observed shifts. Renewed emphasis on nonprice competition and retail strategies, and the service mimicking and one-upmanship that result, suggest that a new medical arms race is emerging. However, there are important differences.
between the medical arms race today and the one that occurred in the 1970s and early 1980s: the hospital market is more concentrated and price competition remains relatively important. The development of a new medical arms race has significant research and policy implications.

2.3 About hospital industry as service sector

Dhiraj Sharma (2004) in his study titled “Just a dose of healthcare statistics” examined the essential services of healthcare in growing society. The potential of health services sector is immense in India. People have confidence in healthcare products and services offered by private hospitals. The quality of healthcare has improved considerably with the availability of world class high-tech medical equipment and information technology. However, the low penetration of health insurance is limiting the growth of these world-class services.

2.4 About Occupational stress

Antonovosky (1974) in his research work titled “Health, Stress and Coping” outlined stress as a “demand made by the internal or the external environment on an organism (such as you or me), that upsets its homeostasis (or equilibrium), restoration of which depends on a non-automatic and not readily available energy-expending action”, whether or not a given stimulus or experience means to the individual, as well as on the repertoire of ways that he/she uses in order to cope with such demands.

Robert E. Levey (2001) in his research publication titled “Sources of Stress for Residents and Recommendations for Programs to Assist them” analyzed The fact that stress is typical during the residency training period: heavy work-load, sleep deprivation, difficult patients, poor learning environments, relocation issues, isolation and social problems, financial concerns, cultural and minority issues, information overload, and career planning issues. Stress can also stem from and exacerbate gender-related issues and problems for others, spouses, and family members. Common effects of stress include anxiety, depression, obsessive-compulsive trends, hostility,
and alcohol and substance abuse. To respond to the problems that these many stressors present to residents, the Accreditation Council for Graduate Medical Education (ACGME) requires that all post–medical-school medical training programs make assistance services available for all residents.

Mitra Mollaie nezhad et al (2001) in their article work titled “Infertility Related Stress and Marital Life in Iranian Infertile Women who referred to Isfahan Infertility Treatment Clinic”, found linkage between infertility and stress and deleterious impacts that infertility stress can have on the functioning of a marriage and the couple’s life quality. It was designed to determine the correlation between infertility related stress and marital adjustment in women who referred to Isfahan and infertility treatment clinic. All of the participants had experienced infertility stress (in different degrees) and about half of them were maritally distressed. For these women, infertility stress scores were significantly related to economic problems, family composition, duration of treatment and confidence one will have a child. Duration of infertility and a positive history of failed pregnancy were the only variables that were significantly related to this variable.

S. Michie (2002) in his research work titled “Causes and Management of Stress at Work” conceived stress as pressure from the environment, then as strain within the person. It is the psychological and physical state that results when the resources of the individual are not sufficient to cope with the demands and pressures of the situation. Thus, stress is more likely in some situations than others and in some individuals than others. Stress can undermine the achievement of goals, both for individuals and for organisations. The workplace is an important source of both demands and pressures causing stress, and structural and social resources to counteract stress. The workplace factors that have been found to be associated with stress and health risks can be categorised as those to do with the content of work and those to do with the social and organisational context of work. Most interventions to reduce the risk to health associated with stress in the workplace involve both individual and organisational approaches. The prevention and management of workplace stress requires organisational level interventions, because it is the organisation that creates
the stress. Success in managing and preventing stress will depend on the culture in the organisation. Stress should be seen as helpful information to guide action, not as weakness in individuals.

Hirak Dasgupta and Suresh Kumar (2009)\textsuperscript{24} in their study titled “Role stress among Nurses working in a Government Hospital in Shimla” concluded that role overload, self-role distance, role isolation, inter role distance, role stagnation, role expectation conflict, role ambiguity and role inadequacy are the factors causing role stress among nurses. The study proved that there is no significant difference between the stress levels among the male and female nurses except in the cases of inter role distance and role inadequacy where the male nurses are more stressed than the female nurses.

Seema Bhatt and Pramod Pathak (2010)\textsuperscript{25} in their research publication titled “Occupational stress among IT/ITES women professionals in leading metros in India: A case study” identified the occupational stress among IT/ITES professionals and examined whether there exists any significant differences in the nature and intensity of stress pattern among IT/ITES professionals with respect to gender and marital status. It was evident that male and females are affected differently by some stressors; therefore their problems need to be addressed in different ways. It was further inferred that marriage did not have any impact on these professionals. They concluded that the IT/ITES professionals were vulnerable to stress and some interventions were needed to help them cope with the situation.

Nidhi Turan and Sultan Singh (2011)\textsuperscript{26} in their study titled “Association of Organisational Stress Symptoms with Employees’ Demographic Variables” examined the association between different manifestations (headache, diabetes, depression, general stress, high blood pressure, ulcer, fatigue, backache or pain) of stress and employees’ demographic variables (age, gender, education and length of work experience). The study revealed that a majority of the respondents have ascribed headache, depression, general stress, high BP, fatigue and back pain to their roles on the job. They suggested that there was a need for special precautionary measures in case of employees in higher age groups, particularly for the females.
2.5 Occupational stress of employees in service sector

Ahmad et al (1985)\(^{27}\) in their article titled “A study of stress among executives” assess stress levels among 30 executives from both the public and private sector, using an ORS scale to measure ten dimensions of role stress. Their study reveals significant differences between public and private sector employees in three dimensions of role stress—role isolation, role ambiguity, and self-role distance. The authors also establish the insignificant effect of several background factors, such as age, level of education, income, marital status, and work experience.

According to Sharma (1987)\(^{28}\) in his thesis titled “Differential effects of organizational climate on job satisfaction, sense of participation, alienation and role stress” focuses on the managers and supervisors of public and private pharmaceutical organizations to ascertain the role of a motivated climate on four psychological variables: (i) job satisfaction, (ii) participation, (iii) alienation, and (iv) role stress. The study’s sample comprises 150 respondents, including 75 managers and 75 supervisors. Sharma’s findings indicate that employees of public sector organizations score lower than and differ significantly from those of private sector organizations. However, public sector employees score significantly higher in terms of role stagnation.

Chaudhary (1990)\(^{29}\) in his thesis titled “A study of the relationship between job satisfaction and role stress of bank officers” probes the relationship between role stress and job satisfaction among bank officers. The author’s results indicate that role erosion and resource inadequacy act as dominant stressors while role ambiguity and role expectation conflict are remote contributors to role stress in the sample population.

M Estryn-Behar et al (1990)\(^{30}\) in their study titled “Stress at work and mental health status among female hospital workers”, analysed relations between working conditions and mental health status of female hospital workers. Job stress and insufficiency in training and discussion did not vary according to the shift; the night shift was characterized by a significantly lower mental load and the afternoon shift by a high level of strain due to schedule. Higher the mental load, the
insufficiency in training, or the strain due to schedule, the higher the job stress index was. Fatigue and sleep impairment were significantly more frequent when the number of children at home was higher. Job stress, mental load, and strain due to schedule appeared as the most important occupational factors in mental health, sleep impairment being mostly affected by the shift.

Srivastava (1991)\textsuperscript{31} in his article titled “A study of the role stress-mental health relationship as a moderator by adopting coping strategies” surveys 300 employees of the Life Insurance Corporation and reports that there is a significant positive correlation between various dimensions of role stress and symptoms of mental ill health. Stress arising from role ambiguity and role stagnation is most intensively correlated with anxiety.

Dwivedi (1997)\textsuperscript{32} in his study titled “Trust and role stress” assesses the magnitude of trust, distrust, and ORS to determine the extent of this relationship among public and private sector organization. Surveying 55 executives from the public sector and 62 from the private sector, the author finds that stress levels are low in high-performance organizations and high in low-performance organizations.

Elaine Adams (1999)\textsuperscript{33} - The specific objectives of the study on “Vocational Teacher Stress and Internal Characteristics” were to (a) identify variables emanating from teacher internal characteristics that explain vocational teacher stress and (b) build and test a model to explain the inter-relationships among internal-related variables and vocational teacher stress. Vocational teachers, having the least amount of preparation in their teaching roles, suffered the greatest amount of job-related stress. The lack of job or life satisfaction increased vocational teachers' stress. Vocational teachers experiencing illness symptoms reported greater stress. Role preparedness, illness symptoms, and self-esteem were found to be significant contributors in explaining vocational teacher stress. Teachers report less stress when they and their peers believe them to be capable of completing school assignments.

K. Chandraiah et al (2003)\textsuperscript{34} - The present study on “Occupational Stress and Job Satisfaction among Managers” was planned to investigate the effect of Age on Occupational stress and job satisfaction among managers of different age groups.
The findings of the study reveals higher levels of job stress and less job satisfaction among managers of 25-35 years age than their counterparts in the middle age (36-45 years) and the old age groups (46-55 years). The study also found that the age seemed to be negatively correlated with occupational stress and positively with job satisfaction. The young adults and the early middle aged were experiencing more stress due to role overload, role ambiguity and strenuous working conditions compared to late middle aged. Regarding role conflict, the two middle age groups were similar to each other while the young adults were found to experience significantly more stress. Individuals under excessive stress tend to find their jobs less satisfying. The subjects with lower job satisfaction were found to experience more stress in the form of overload, role ambiguity, role conflict, under participation, powerlessness and low status compared to those with higher job satisfaction. Age, therefore, was found to be of importance in this study.

Macklin et al (2006)\(^{35}\) in their study titled “Public and private sector work stress: Workers’ compensation, levels of distress and job satisfaction, and the demand-control-support model” surveyed 84 public and 143 private sector employees to assess any significant difference in their stress levels. They conclude that there is no significant difference between employees on the basis of sector, but that there is a significant difference between genders, i.e., female employees are subject to greater stress than males.

D’Aleo et al (2007)\(^{36}\) examined in their research work titled “Managing workplace stress: Psychosocial hazard risk profiles in public and private sector Australia” a sample of 559 public and 105 private sector employees to assess their respective risk profiles. They find that public sector employees face more stress than private sector employees.

According to Bette Prakke et al (2007)\(^{37}\) in their study” titled Challenging parents, teacher occupational stress and health in Dutch primary schools”, examined teacher’s perceptions of their own ability to handle challenging parent behaviour and to establish positive relationships as a possible influence on the quality
of teacher-parent relationships. Teachers, who experience stress from challenging parent behaviour, suffer mostly from negative feelings toward parents, frustration on working with parents, loss of satisfaction with teaching and to lesser extent health problems. The main aim of this research project is to identify at-risk teachers (i.e. those most vulnerable to the presence of behaviourally challenging parents) so that interventions, both in initial teacher training as well as in in-service training, can be applied to help them develop adequate attitudes and coping skills. The central issues are (a) the impact of the parent’s behavioral characteristics on the teacher’s self-perception and health, and the teacher’s perception of support or lack of support from the colleagues in the school. Therefore, the central ideas of this research are (a) to improve the quality of the parent-teacher relationship, (b) the goodness of fit between parent and teacher, and (c) the role of expectations and cognitions in moderating or exacerbating the experiences of being stressed or feeling unhealthy.

Srimathi and Kiran Kumar (2010) in their publication titled “Psychological well being of Employed Women across Different Organizations” examined the level of psychological well being among working women in different professions. Women working in different organizations – industries, hospitals, banks, educational institutions and in call centers/BPOs were randomly selected. Results revealed that women employees working in industries had least psychological well being followed by women working in health organizations. Women employees working in banks had medium level of psychological well being. Women teachers had highest total Psychological well-being.

Urmila Rani Srivastava (2010) in her study titled “Shift work related to stress, health and mood states: A study of Diary workers” found that that shift workers significantly experienced higher level of job and life stress, higher indices of negative mental health outcomes and variations in mood states as compared to day workers. The findings indicated that shift workers mood states such as anger, tense arousal and hedonic tone were significant predictors of mental health outcome. In day group of workers anger coupled with low level of energetic arousal influenced their mental health. Anger was the strongest predictor of all indices of negative mental
health outcome. The study concluded that shift and night shift work are potent sources of stress and shift work is opposed to the human circadian system and this conflict creates multiple physiological, psychological and psychosocial problems for shift workers.

Saif ur Rehman et al (2010)\textsuperscript{40} in their study titled “Stress in banker’s life: Demands-Control Model as Predictors of Employee’s activity participation” focused on the reliability and validity of job factors and analyzed their association with demands-control model and activity participation in two time cross-sectional study of private and public sector commercial banks of Rawalpindi-Islamabad region. Twice self-reported cross-sectional surveys were conducted. Appropriate internal consistencies of the five factors i.e., demands, control, job stress, activity participation and social supports were obtained. Findings from current research suggested that control must be classified into (a) personal skill and ability to manipulate, (b) colleagues support in work activity, and (c) supervisory support to exercise power and assistance in carrying out work activity.

Vishal Samartha et al (2010)\textsuperscript{41} in their research paper titled “Impact of Occupational Stress on Employee Performance in Banks - An Empirical Study” conducted a study to understand the impact of occupational stress on job performance of the employees working in banks. It was observed that female employees are more exposed to stress as they have more responsibilities in family. It was revealed that employees with lower qualification experience more stress. The lower income and married employees are also prone to high stress. The results also revealed that stress level has been decreasing these days because of the use of advanced technology in banks.

Devesh Kumar et al (2011)\textsuperscript{32} in their research article titled “Study of occupational stress among railway engine pilots” analyzed that traffic volume and speed is going to be increased in Indian Railways successively, leading to higher stress in staff connected with train operations. The jobs of railway engine pilots come under the category of high-strain jobs. Occupational stressors of railway engine pilots were found significantly higher to that of office clerks. Occupational stressors of goods
train pilots were significantly higher in comparison to high-speed train pilots and passenger train pilots. Highest subgroup of stressor observed was role overload followed by role conflict.

Sumit Prakash et al (2011) in their study titled “Study to assess the level of stress and identification of significant stressors among the railway engine pilots” assessed that increasing demands, exacting management, poor ergonomics, and intense competition within and without are likely to contribute to stress among the railway engine pilots. This excess of stress and its consequences cost very high to both the organization and the consumers. Top ten stressors have been identified and postural discomfort tops the list. The study also identifies minimal efforts from administration to reduce stress of its employees.

Malik (2011) in his research work titled “A study on occupational stress experienced by private and public sector bank employees in Quetta city” collected data from 200 bank employees in Quetta, Pakistan, of which 100 work in public sector banks and the remaining 100 in private sector banks. The author finds that there is a significant difference in the level of stress to which both groups are subject, and that public sector bank employees face a high level of occupational stress.

D.Rajan (2012) in his study titled “Occupational Stress among Sanitary Workers” analyzed that Sanitary workers are more susceptible occupational groups for occupational stress. Illiteracy, poverty, unplanned life styles and lack of knowledge to cope with the stress are the commonest factors producing stress among them. In the work place, unclear job description, in equity, lack of respect, not permitting in the department’s decision making process, heavy work load and inferior estimation are the commonest stress producing factors in the work place. Absenteeism and frequently availing leave, quarrelling and turnover are the commonest problem among the sanitary workers. Stress among the sanitary workers affects their efficiency and lack of involvement in the work place affecting the infection control and thereby affecting health and safety of the patients.
2.6 Occupational stress of women

Maryam Zarra-Nezhad et al (2010) in their research work titled “Occupational Stress and Family Difficulties of Working Women” found that work and family are the two most important aspects in women’s lives. Balancing work and family roles has become a key personal and family issue for many societies. There are many facets in working mother’s lives that subject to stresses. They deal with home and family issues as well as job stress on a daily basis. Imbalance between work and family life arises due to a number of factors. Various factors appear to strengthen the brunt of pressure on women. There were significant positive relationship between levels of occupational stress and family difficulties in working women.

Aryan Gholipour et al (2011) in their study titled “Organizational Bullying and Women Stress in Workplace” reviewed the relationship of organizational bullying and stress on women. Their findings depicted the dominance of the stressful factors in workplace and proposed some measures to remedy them. The results illustrated that relationship between the bullying and stress was significant. They revealed that some factors such as unawareness of women of their rights, unawareness of an accurate definitions of bullying, unfamiliarity with its elements and neglecting them in the workplaces and finally, approval of masculinity have entailed the emergence of the passive position of women.

Amit Sharma and Soniya Chaudary (2011) in their study titled “Stress among working women: A comparative study on Government and private Sector” examined the level of stress among the working women in different type of organizations. They reported that the level of stress in women working in private sector was higher than the level of stress in women working in government sector. There was no association between the age and experience of a woman and the level of stress. This indicated that the level of stress depends on the type of organization rather than age and experience of women.

Hayfaa A. Tlaiss (2013) in his research publication titled “Women in Healthcare: Barriers and Enablers from a Developing Country Perspective”
explored the overall status of women managers in an industry that is overpopulated with women employees and under-populated with women managers. This study suggests that although women constitute the majority of the workforce in the healthcare sector, they are not fairly represented in management. Their careers in management are often hindered by macro-social and meso-organizational obstacles and barriers. Similarly, the attitudinal and structural barriers that women faced at the meso-level were almost inseparable from the macro socio-cultural factors and the overall conditions of the healthcare sector.

2.7 Origin and Growth of Nursing

In the mid 1960s, Ford and Silver (1967)\textsuperscript{50} in their research paper titled “Expanded role of the nurse in child care”, grasped the problems in the health care system as an opportunity to create a role such as that of the NP to expand nurses’ scope of practice and provide direct services to patients. They sought to bridge the gap between the health care needs of children and families by providing easily accessible and affordable primary or first contact health care by nurses in rural underserved areas. Over the years, professional clinical nurses had increasingly and competently taken on more medical types of tasks. Clinical nurses were also undertaking less direct patient care because it was delegated to others, leaving them mainly with administrative and technical functions. They also argued that, because of their increased education and knowledge, nurses could be utilised more effectively in a more comprehensive and independent role that was nevertheless consistent with nursing objectives. They argued the need to re-examine professional nurses’ practice while accounting for patient needs, and the potential contribution of highly skilled and educated nurses to increase access to health care. They saw the critical role of education to enable this potential to be realised. They believed that both nursing and medicine could be more effective if they collaborated more. They stressed that the enhanced nursing role should not be seen as a substitute for the physician but instead a collaborative and collegial relationship.

Jann P. Foster (2010)\textsuperscript{51} in his study titled “A History of the Early Development of the Nurse Practitioner Role in New South Wales, Australia”, said
about Advanced Practice Registered Nurse (APRN), an umbrella term used in the US for nurse anaesthetists, nurse-midwives and clinical nurse specialists who were introduced many years before the introduction to research of NPs. NPs themselves were later classified as APRNs. Advanced practice nursing might be considered a precursor of the NP role.

2.8 Occupational stress of nurses

J.T. Bailey et al (1980) in their study titled “The stress audit: Identifying the stressors of ICU nursing” included management difficulties, interpersonal relationships with other nurses and medical staff, issues involving patient care, concerns about technical knowledge and skills, workload and career issues. Irrespective of the specialized nursing involved, critical or intensive care nurses appear to be as vulnerable to workload issues, patient conflicts and the difficulties imposed by adequate resources, as nurses in other areas.

According to Pines and Kanner (1982) in their research work titled “Nurses’ burnout: Lack of positive conditions and presence of negative conditions as two independent sources of stress” found that workload has a negative impact on the relationships among nurses, as they have no time for social contact, interpersonal interaction and positive feedback, discussions on professional issues, determination of the healthcare unit targets and assurance on the importance of their work.

Gruen et al (1988) showed in his study on “Centrality and individual differences in the meaning of daily hassles” that roles and commitments of individuals relate directly to the major everyday problems and the way they are perceived.

According to Callaghan (1991) in his study titled “Organization and stress among mental health nurses” identified that increased workload has been confirmed as a stressor.
Pateraki, et al (1995)\(^56\) in their research paper titled “Nursing burnout: Causes, prevention and treatment” found that occupational stress can negatively influence a nurse’s personal and family life. Introducing a time interval between work and return to home, as well as having leisure activities helps a nurse relax and block carrying stress in family life.

Adali et al (2000)\(^57\) in their study titled “Influence of nurses’ demographic and occupational characteristics in the appearance of work burnout” found that increased work overload along with conflicts regarding work and family roles result in increasing stress. These findings are consistent with those of previous studies that classify the nursing profession as the most stressful one compared with other health professions.

According to Adali and Lemonidou (2001)\(^58\) in their research paper titled “Contributing factors to the appearance of nursing work burnout” said that reduction of work overload with rational management of human resources regarding nursing staff establishes a balance between work demands and capabilities of the nursing staff (ICN).

Weiss (2004)\(^59\) in his study titled “Finding time for fitness” found that the nursing staff’s family life can be influenced by their work, through frequent shifts, which are a main features of nursing occupation.

Ouzouni (2005)\(^60\) conducted a study on “A research study of the factors causing stress in nursing staff in short treatment psychiatric units” on 89 mental health nurses has shown that among the most frequent sources of occupational stress for nursing staff is the role conflict between family and work. He also identified another important factor which is lack of support and positive feedback to the nursing staff by the administrative executives in the nursing services.

According to Papageorgiou et al (2007)\(^61\) in their research paper titled “Stress levels and self-awareness of nurses occupational in public hospitals” It is possible that a nurse under stress withdraws, behaves negatively and has a short-temper, is often absent from work, and performs in a less effective manner comparing to her best
and she has often wished to quit the profession. In the bottom line, the important one who will be harmed due to nurses’ stress is the patient. A nurse under stress will care for patients in a cold, indifferent and depersonalized way, with apathy and disappointment.

Marvaki et al (2007)\(^{62}\) conducted a study on “The influence the profession has on the nursing staff’s life” on 282 nurses and nursing assistants in Greek hospitals has shown that occupational roles in a hospital influence personal, family and social life of the nursing staff, and in particular, the life of women and of people employed for more than 10 years. He also found that clinical nurses work under conditions of intense stress with limited autonomy in decision making, since they often work under policies defined by others.

Andoniou (2007)\(^{63}\) in his study related to the title of “Occupational stress sources” identified that stress is the second-in-frequency health problem regarding the occupational environment. It is estimated that 28% (about 1 in 3 people) of employees within European Union experience occupational stress.

According to Jonathan Wolfenden (2011)\(^{64}\) in his study in the title of “Men in Nursing” examined the view of men in nursing. Men have been present in the profession of nursing throughout recorded history. The systematic trend to marginalize men in nursing means men will never be truly accepted in nursing, which in turn, will exacerbate the current nursing shortage the profession is experiencing. The education of nurses is another area where men are marginalized in nursing, as the education of nurses is increasingly feminized.

2.9 Occupational stress of women nurses

Gray-Toft and Anderson (1981)\(^{65}\) in their study titled “Stress among Hospital Nursing Staff: its Causes and Effects” of patient-care units including medical, surgical, cardiovascular, surgery, oncology and hospice nursing found that the major sources of stress experienced to be workload, death and dying and feelings of inadequacy in meeting the needs of the patients and their families. Other sources of stress varied as a function of type of a unit. With regard to type of unit the variable
‘uncertainty over treatment’ was higher in the medical and oncology units but lower in the hospice environment (i.e. palliative care for terminally patients). The authors pointed out that the medical unit included patients with a wide variety of conditions and communicable diseases that requires isolation. Not surprisingly, levels of uncertainty were high. In contrast, the hospice unit was a new unit with well trained staff and a high staff-patient ratio.

K. A. Sanders and N. W. Bruce (1997)\textsuperscript{66} in their research work on “A prospective study of psychosocial stress and fertility in women” compared average stress levels during the month of conception to those of previous infertile months. They postulated that stress level during the actual month of conception would be lower than that during previous non-conception cycles. On average, women reported significantly more favourable mood states on standard psychometric tests, during the month of conception than during the previous non-conception cycles. In addition, they felt significantly less 'hassled' during the month of conception. There was little relationship between the psychological measures of mood state and excretion of adrenaline and cortisol. There was no evidence of increased coital frequency during the month of conception when mood states were improved, suggesting that stress effects on libido were unlikely to account for the findings. The results support the conclusion that psychosocial stress influences fertility in females, but as yet mechanisms remains unclear.

Paul D Tyson and Rana Pongruengphant (2004)\textsuperscript{67} in their study related to “Five-Year Follow-up Study of Stress among Nurses in Public and Private Hospitals in Thailand” examined sources of occupational stress, coping strategies, and job satisfaction. He revealed a significant increase in nurses’ workload, involvement with life and death situations, and pressure from being required to perform tasks outside of their competence. Although nurses working in public hospitals generally reported more stress than private hospitals, surprisingly nurses’ satisfaction with their job increased particularly in public hospitals, which may be attributable to age, improvements in monetary compensation, and organizational support.
V. J. McCarthy, S. Power and B. A. Greiner (2010) in their research work on “Perceived occupational stress in nurses working in Ireland” examined that stress has been seen as a routine and accepted part of the health care worker’s role. Work pressures are seen as part of everyday life for health professionals. Healthcare workers have been recognized as experiencing occupational stress. Nursing is associated with a range of different demands; these include physical (high workload), emotional (issues to do with death and dying) and social demands (conflict with colleagues). Perceived stress varies within different work areas in the same hospital. Provision for nurses to deal with job demands at work could reduce perceived stress.

Nirmanmoh Bhatia et al (2010) in their study titled “Occupational Stress amongst Nurses from Two Tertiary Care Hospitals in Delhi” analysed the individual contribution of various stressors; operational in nurse’s personal and professional life, to the overall stress levels. Time Pressure’ was found to be the most stressful whereas ‘Discrimination’ was the least stressful of the given possible sources of stress in everyday life. Other highly stressful sources were: handling various issues of life simultaneously with occupation such as caring for own children/parents, own work situation and personal responsibilities. ‘High level of skill requirement of the job’ was the most important stressor and ‘helpfulness of supervisors/senior sisters’ was the least significant stressor directly related to nursing profession.

Other significant work related stressors were: the fact that their jobs required them to learn new things and that they had to attend to too many patients at the same time. Equitable distribution of shift schedule as well as regular biweekly or monthly meetings by senior nurses and supervisors to discuss various issues causing stress to nurses are some of the measures that can be undertaken to de-stress the nurses. Also most nurses did not follow negative strategies like smoking or drinking and neither did they alter their eating or sleeping habits to handle their stress.

Christian Negeliskil and Liana Lautert (2011) in their article titled “Occupational Stress and Work Capacity of Nurses of a Hospital Group” aimed to evaluate the relationship between occupational stress and the work capacity index of nurses of hospital group. Social support constitutes a pillar of the occupational
conjuncture and a strategy of social organization in the institutions in order to prevent and/or to reduce occupational stress. The aspects considered in the present study are elements that can contribute to the conception and development of measures aimed at preserving the work capacity, prioritizing the monitoring and control of occupational stress with emphasis on the psychosocial work relationships, thus improving the promotion, the protection and the restoration of the health of the workers.

2.10 Causes of occupational stress of women nurses

Callahan (1993)\textsuperscript{71} in his research publication titled “The troubled dream of life: Living with Mortality” focused strategies in terms of dealing with organizational change, involve efforts to modify or eliminate the source of stress by dealing with the situation. In their organization, individual employees can seek information by talking to superiors, co-workers or subordinates, by making plans of action, or through bargaining or reaching a compromise to seek a possible solution. Work-related stressors are likely to elicit problem-focused coping because the situation is often appraised as changeable. However, a period of large scale organizational change can make some people feel out of control and powerless, so that it would not be usual for some degree of emotion-focused coping by employees. Emotion-focused coping could help people maintain their effective equilibrium as they regulate their feelings about the changes occurring around them.

Lee (2003)\textsuperscript{72} in his study titled “Job stress, Coping and Health Perceptions of Hong Kong Primary Care Nurses” indicated that job stress is significant in nursing. Nurse’s high job stress is well documented. In particular, the job stress of nurses working on acute and specialized care units has been widely studied. Heavy workload, poor staffing, dealing with death and dying, inter-staff conflict, strain of shift work, careers, and lack of resources and organizational support have been identified as the major sources of job stress. It has also been found that different nurses experienced job stress differently. Some studies reported that senior registered nurses and charge nurses experienced a higher degree of stress than other ranks of nurses. However, other studies found that stress level was significantly higher in junior
nurses than in senior nurses. There are also studies reporting that the longer the nurses had worked in their units the more likely they were to experience stress, regardless of their seniority

Susan B. Hassmiller and Maureen Cozine (2006) identified that nurses are the largest group of health care professionals providing direct patient care in hospitals, and the quality of care for hospital patients is strongly linked to the performance of nursing staff, according to an Institute of Medicine report. Nurses are the linchpins in providing high-quality patient care in hospitals. To attract high-quality staff, enable them to do their best work, and keep them as long-term employees, improvements must be made in the organization of work and use of information technology (IT); physical design and allocation of space; and hospital leadership and culture.

A kind of vicious circle surrounds the nursing profession. Fewer people are working in nursing, which has led to a shortage. Because of the shortage, nurses who remain in hospital work must care for more patients under increasingly difficult working conditions. Because of these strained working conditions, more nurses leave the hospital workforce, thereby worsening the shortage and making recruitment of new nurses more difficult. The nurse shortage today is more complex than shortages of the past, and the stakes are higher than ever as the population ages and contends with more chronic conditions. Ending the shortage will require efforts not only to recruit new nurses and address faculty shortages in schools of nursing but also to work with hospital administrators, nurse leaders, and nurses at the bedside to improve the work environment for nurses and with researchers to shed light on the many factors related to the problem and on promising solutions.

Soheila Mojdeh et al (2008) - The aim of this study titled “Relationship of nurse's stress with environmental-occupational factors” was to assess relationship of nurse's stress with environmental and occupational factors. Study results showed that stress level of nurses working in Al-Zahra hospital was moderate. Responses to this stress can affect nurse-patient relationship in workplace, among this, with
appropriate and low-expenses methods can cope with stress and decrease its level. It is recommended that health care services invest more on exercise and recreational fields. On the other hand, occupational stress results in increasing job-related accidents. Absence of work, decreasing productivity and responsibility and both of these will result in decreasing quality of care which is presented to the patients.

*Jacoba J. van der Colff and Sebastiaan Rothmann (2009)* in their study on “Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa” assessed the relationship between the occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa. The results show that the experience of depletion of emotional resources and feelings of depersonalization by registered nurses were associated with stress due to job demands and a lack of organizational support, focused on ventilation of emotions as a coping strategy, and a weak sense of coherence. Work engagement was predicted by a strong sense of coherence and approach coping strategies. Registered nurses experience the following stressors relating to lack of organizational support as relatively severe: staff shortage, inadequate salary, insufficient personnel to handle the workload, fellow workers not doing their jobs and poorly motivated coworkers.

The following stressors relating to job demands were experienced as relatively severe: excessive administrative duties, demands from clients/patients and health risks posed by contact with patients. Regarding stress due to nursing specific demands, performing painful procedures on patients and watching a patient suffer were identified as the two most intense stressors. Occupational stress due to a lack of organizational support and job demands contributed significantly to emotional exhaustion and depersonalization. Burnout (emotional exhaustion) was moderately related to work engagement, while depersonalization was related to both personal accomplishment and work engagement. Therefore, occupational stress could possibly impact on work engagement through its effect on burnout. Coping strategies showed that a relationship exists between emotional exhaustion and focus on and venting of emotions, meaning that nurses who make use of this coping strategy revealed higher levels of emotional exhaustion.
According to Ashraf et al (2009)\textsuperscript{76} in their research paper titled “Nurse stress at two different organizational settings in Alexandria” reported that work load, work under load, changing work load, unrealistically high expectation by others of one’s role, coping with new situations, uncertainty about degree of responsibility, security of employment, exposure to death, new technology, shortage of staff, working conditions, privacy, shortage of resources, shortage of support staff, difficulty patients were kept as stress dimensions. The analysis revealed work load, lack of job security, shortage of support staffs and shortage of resources as the most important factor.

Malliarou Maria et al (2010)\textsuperscript{77} in their study paper titled “Greek Registered Nurses’ Job Satisfaction in Relation to Work-Related Stress. A Study on Army and Civilian Rns.” presents the views of Greek Army Registered Nurses and Civilian Registered Nurses on job satisfaction and job stress and why they are lead to seeking employment elsewhere. The most frequently mentioned source of job stress for civilian RNs is not having a say on the appearance and structure of their work environment, not being appreciated and not treated as equal to other health professionals. Civilian RNs’ occupational stress leads to their leaving the workplace.

Eleni Moustaka and Theodoros C Constantinidis (2010)\textsuperscript{78} in their work on “Sources and effects of Work-related stress in nursing” said that the aim of this systematic review was the examination of the sources and consequences of occupational stress on nurses’ adequacy, productivity, and efficiency. A number of aspects of working life have been linked to stress. Aspects of the work itself can be stressful, namely work overload and role-based factors such as lack of power, role ambiguity, and role conflict. The review demonstrated that a great deal is known about the sources of stress at work, about how to measure it and about the impact on a range of outcome indicators.

Hui Wu et al (2011)\textsuperscript{79} in their study related to “Factors associated with occupational stress among Chinese female emergency nurses” studied demographic characteristics, work situations, occupational roles and personal resources. The correlation analysis was made with the factors role overload, role boundary, role insufficiency, social support, chronic disease and self care. The study
Jiska Cohen Mansfield (1995) in his study on “Stress in nursing home staff: A review and a theoretical model” found that a large number of factors affect occupational stress from workplace issues such as institutional policies and residents disabilities to the personal lives of the nursing staff. The stress in turn causes work dissatisfaction followed by staff intent to leave, resulting in increased turnover. Staff stress also affects the individual worker in many ways. The model encompasses the antecedents, responses and consequences of stress for individual in an organization. The outcome variables affect the initial sources of stress and resources both at the job and at the personal levels producing a cyclic process.

According to Wilmar B. Schaufeli (1995) in his study titled “The Evaluation of Burnout Workshop for Community Nurses”, evaluates the effects of a burnout workshop that was conducted for community nurses. High reactive nurses experience more burnout than low reactive nurses. Moreover, the workshop has a differential effect depending on the nurses’ level of reactivity; symptoms of exhaustion and psychological strain which decrease in low reactive nurses. On the other hand, high reactive and accordingly less stress resistant nurses remain at the same symptom level.

Moon-Hee JUNG (1999) in his research work titled “The Prospect for Occupational Health Nursing Activities in Small and Medium Sized Workplaces”, health management affairs have so far aimed at decreasing occupational diseases, but when working conditions are improved and occupational diseases decrease, their goals will be changed, aiming at the health promotion and the prevention of general diseases which have been steadily increasing. Most of all, because of poor working conditions, their turnover is high and their term of service is short. In relation to this, the tendency to replace them with less experienced nurses may give rise to quite a few problems in maintaining reliable relationships with workplaces as well as providing professional services. Therefore, in order to produce high-quality professional services, it is necessary to improve the working conditions of nurses so as to secure nurses who can work for a long time.
Y Yang et al (2002) in their study on “Self perceived work related stress and the relation with salivary IgA and lysozyme among emergency department nurses”, assessed that Emergency Department nurses, who reported a higher level of professional stress, showed significantly lower secretion rates of salivary IgA and lysozyme compared to General Ward nurses. Salivary IgA and lysozyme were inversely correlated with self perceived work related stress. As these salivary biomarkers are reflective of the mucosal immunity, results support the inverse relation between stress and mucosal immunity.

D Feskanich et al (2002) in their study titled “Stress and suicide in the Nurses’ Health Study”, examined prospectively the associations between self perceived stress, diazepam use, and death from suicide among adult women. There was an almost fivefold increase in risk of suicide among women in the high stress category. Risk of suicide was over eightfold among women reporting high stress or diazepam use compared with those reporting low stress and no diazepam use. The relation between self reported stress and suicide seems to be U shaped among adult women. The excess risk for those reporting minimal stress may reflect denial or undiagnosed depression or an association with some other unmeasured risk factor for suicide.

Ruta Telksniene and Vidmantas Januskevicius (2003) - The aim of the work in the title of “Occupational Skin Diseases In Nurses” was to evaluate the incidence of occupational skin diseases in nurses, their morbidity rate, symptoms, possible causes and relation with occupational environment. It was revealed that nurses were suffering from occupational skin diseases. Allergic contact dermatitis was found to be the most frequent disease. Irritant contact dermatitis of non-allergic origin was diagnosed in nurses. The main symptoms of occupational skin diseases were itching and reddening. The risk of developing occupational dermatitis was increased by working with aldehydes and hydrogen peroxide as well as by using latex gloves and long working hours. The most effective protective measure is to reduce the frequency and duration of exposure. In the health care sector, a closer look into the infection preventing protocols may reduce the frequency of hand washing and the
concluded that the factors role overload, role boundary and role insufficiency had the highest association with occupational stress. The study suggested improving work conditions, providing health education and occupational training programmes might help to reduce occupational stress among Chinese female emergency nurses.

2.11 Outcome of occupational stress of women nurses

Stephan J. Motowidlo et al (1986) in his paper titled “Occupational Stress: Its Causes and Consequences for Job Performance”, conducted two studies of occupational stress and its relation with antecedent variables and job performance. The first study was designed to identify specific events associated with stress for hospital nurses. Study 2 examined relations between the stressful events identified in Study 1, work conditions, individual characteristics, subjective stress, affect, and job performance. They involve matters such as work overload, uncooperative patients, criticism, negligent co-workers, lack of support from supervisors, and difficulties with physicians. These results give us some preliminary confidence that these items describe events that cause stress for hospital nurses. We expect to find that nurses who experience them more frequently and more intensely are more stressed and, as a result, perform their jobs less effectively.

Arlene S. King et al (1994) in their paper presented in the title of “Mortality among Female Registered Nurses and School Teachers in British Columbia”, examines mortality among female nurses and female school teachers who died in British Columbia (BC) during the years 1950-1984. These occupations were selected for analysis, as they are professional jobs in which women remain for an extended period of time. The mortality profile of female nurses and teachers in British Columbia (BC) was examined using age-standardized proportional mortality ratios (PMRs). Significantly elevated PMR values were observed for cancer of the breast and ovary in nurses of age 20-65 years. PMRs were significantly elevated for cancer of the pancreas and leukemia among those age 20 years and older. Elevated values were also observed for motor vehicle accidents and suicide among nurses in both age groups. Lower than expected mortality from degenerative heart disease and cerebrovascular accidents were seen in working age teachers (age 20-65 years).
amount of soap and disinfectants used to clean the hands; just water or less irritant isopropyl alcohol may often be sufficient.

Yeon-Soon AHN and Hyun-Sul LIM (2008)⁸⁸ - Through their study on “Occupational Infectious Diseases among Korean Health Care Workers Compensated with Industrial Accident Compensation Insurance from 1998 to 2004”, we were able to elucidate the characteristics of occupational infectious diseases among Korean health care workers. These results have to be considered when establishing the management policy for prevention of occupational infectious diseases among Korean health care workers. Also, all knowledge from these Korean cases will be helpful to make good practices to promote occupational safety and health in the new era of globalization. Most of the blood-borne infections are preventable by adhering to general infection control principles, as well as strictly complying with the universal precaution guidelines. Also, many compensated cases occurred in nurses of a childbearing age, which could affect not only the workers, but also their fetus. This suggests that the management policy to prevent occupational infectious diseases must be focused on nurses. Also, some staff members who were not directly taking care of patients were at risk of infection. Thus, all workers in medical settings have to be cautious not to be infected from patients.

Rubina Kazmi et al (2008)⁸⁹ in their study on “Occupational stress and its effect on job performance - A case study of medical house officers of district Abbottabad” investigated the effect of job stress on job performance. Lack of resources, work overload and lack of communication and comfort with supervisor and colleagues have contributed to increase stress in the house officers more than the other factors. Support from supervisor and colleagues are the major factors to reduce the stress level and make an individual perform at his/her best. Open Communication has an advantage of resolving conflicts between supervisors and subordinates. Lack of effective communication could cause unresolved conflicts that will increase the stress level.
Rosemeire Pereira Bezerra and Ruth Beresin (2009) in their research work titled on "Burnout syndrome in nurses of prehospital rescue team", verified the presence and evaluated the levels of burnout syndrome in nurses of the prehospital rescue team. In the group studied, 76% of the nurses of the prehospital rescue team were female. Ages varied from 30 to 49 years old. As to time already in the profession, 59% reported having worked from five to ten years in prehospital rescue. It was demonstrated that this sample showed no evidence of burnout syndrome, since its presence is proven only when there are high scores of emotional exhaustion, depersonalization, and reduced professional accomplishment.

Pratibha P. Kane (2009) in her study on “Stress causing psychosomatic illness among nurses”, established the existence and extent of work stress in nurses in a hospital setting, identifying the major sources of stress, and finding the incidence of psychosomatic illness related to stress. Psychosomatic illnesses are disorders that involve both the body and the mind. These illnesses are mental or emotional in origin and have physical symptoms. The pressures of overtime and long working hours create a work personal life imbalance, which begins to affect the health of the employees. Other factors such as long commuting hours and chaotic traffic conditions adding to their stress affect the employees’ efficiency and effectiveness. This can have a negative influence on their physical and emotional health and leads to psychosomatic disorders.

Peggy A. Thoits (2010) in his research publication titled on “Stress and Health: Major Findings and Policy Implications” analyzed that when stressors (negative events, chronic strains, and traumas) are measured comprehensively, their damaging impacts on physical and mental health are substantial. Differential exposure to stressful experiences is a primary way that gender, racial-ethnic, marital status, and social class inequalities in physical and mental health are produced. Minority group members are additionally harmed by discrimination stress. Stressors proliferate over the life course and across generations, widening health gaps between advantaged and disadvantaged group members. The impacts of stressors on health and well-being are reduced when persons have high levels of mastery, self-esteem, and/or social support.
To address health inequalities, the structural conditions that put people at risk of stressors should be a focus of programs and policies at macro and meso levels of intervention. Programs and policies also should target children who are at lifetime risk of ill health and distress due to exposure to poverty and stressful family circumstances.

Juan J Tarán et al (2010) in their research paper titled on “Acute stress may induce ovulation in women” identified that acute stress may induce ovulation in women displaying appropriate serum levels of estradiol and one or more follicles large enough to respond to a non-midcycle LH surge. Hypothalamic-Pituitary-Adrenal (HPA) axis exhibits positive responses in practically all phases of the ovarian cycle, acute-stress-induced release of LH is found under relatively high plasma levels of estradiol. However, there are studies suggesting that several types of acute stress may exert different effects on pituitary LH release and the steroid environment may modulate in a different way (inhibiting or stimulating) the pattern of response of the hypothalamic-pituitary-gonadal (HPG) axis elicited by acute stressors. Women may be induced to ovulate at any point of the menstrual cycle or even during periods of amenorrhea associated with pregnancy and lactation if exposed to an appropriate acute stressor under a right estradiol environment.

Kristy L. Keyock and Diane K. Newman (2011) in their study on “Understanding stress urinary incontinence” identified that underreported and undertreated, stress urinary incontinence leads to decreased quality of life in sufferers and financial burdens for both the patient and the healthcare industry. Nurse practitioners should understand their role in identifying, diagnosing, and treating the condition. Urinary incontinence (UI) is a growing problem that affects millions of people worldwide. It is estimated that up to 35% of the total population over 60 years of age is incontinent. Women are twice as likely as men to experience incontinence, and female Medicare beneficiaries are 2.5 times more likely to suffer from the condition. Unfortunately, UI remains under diagnosed and undertreated in the primary care setting. Most patients are reluctant to initiate the subject of UI to their NPs for a number of reasons. Therefore, identifying patients at risk and patients already suffering from UI is the NPs' responsibility. NPs need to be aware that UI is a
debilitating and embarrassing problem for many patients. Providers should screen all patients, especially those at risk for UI. Once screened, there are effective treatments that can be initiated by NPs in the primary care setting.

Hasson D et al (2013) in their research article in the title of “Acute Stress Induces Hyperacusis in Women with High Levels of Emotional Exhaustion” explored if an acute stress will increase auditory sensitivity (hyperacusis) in individuals with high levels of emotional exhaustion (EE). Hearing problems is one of the top ten public health disorders in the general population and there is a well-established relationship between stress and hearing problems. Women with high levels of emotional exhaustion become more sensitive to sound after an acute stress task. This novel finding highlights the importance of including emotional exhaustion in the diagnosis and treatment of hearing problems.

2.12 Strategies to manage occupational stress by women nurses

N.Thompson et al (1994) in their research publication titled “Dealing with stress” suggested that the effects of stress upon people will be governed not only by the level of pressure experienced, but also by the coping strategies people subsequently utilize in an attempt to deal with it. Similarly, in order to prevent stress every person develops a repertoire of coping strategies. Coping according to these authors can be seen to occur at four levels by: removing the stressors from their lives, not allowing ‘neutral’ events to become stressors, developing a proficiency in dealing with situations we do not wish to avoid and seeking diversion from the pressure(s) or by relaxation.

Thalina L. Lindquist et al (1997) in their study titled “Influence of Lifestyle, Coping, and Job Stress on Blood Pressure in Men and Women”, designed to clarify the role of work stress on long-term blood pressure control and in particular to investigate whether perceived work stress directly affected resting blood pressure levels or whether there were indirect effects mediated by coping mechanisms and lifestyle. Seven resting blood pressure measurements were recorded serially on each of two occasions a week apart. Men had higher blood pressures than women; they used more “maladaptive” coping strategies, drank more alcohol, and ate less
healthily but exercised more than women. No direct association between work stress and blood pressure was detected. Various “adaptive” or “maladaptive” coping mechanisms were identified and independently related to both job stress and blood pressure levels. Women were more likely to use “healthier” or adaptive coping mechanisms than men. Thus, work stress had no direct effect on blood pressure, but the ways that individuals reported coping with stress were significantly related to blood pressure, with blood pressure elevation effects appearing to be mediated largely by dietary and drinking habits and physical inactivity. The results point to the need to target individual coping strategies and lifestyle as much as the working environment in workplace.

Cartwright and Cooper (1997)\textsuperscript{98} in their study titled “Managing workplace stress” suggested six major sources of pressure at work: stress in the job itself, role based stress, relationships, career development factors, organizational structure and climate, and the work-family interface. They also suggested two types of symptoms of stress, such as individual and organizational symptoms. These authors argue that raised blood pressure, depressed mood, excessive drinking, irritability, and chest pains are individual symptoms and high absenteeism, high labour turnover, industrial relations difficulties and poor quality control are organizational symptoms encountered in response to stressors.

Seth C Kalichman et al (2000)\textsuperscript{99} proved in their study on “Sources of occupational stress and coping strategies among nurses working in AIDS care” that nurses experiencing stress from their work place were significantly more likely to resort to wishful thinking, plentiful problem solving and avoidance as coping strategy, where as stress originating from patient care was more likely to be dealt with using positive appraisal and acceptance. Interventions designed to assist nurses in managing occupational stress and preventing occupational burnout, must include the sources of work related stress among nurses in AIDS care.

Williams and Cooper (2002)\textsuperscript{100} in their study titled “Managing workplace stress : A best practice Blueprint” analyzed that work-related stress is estimated to affect at least a third of the workforce in any one year. It costs organizations billions
of pounds a year in lost productivity and accounts for over half the working days lost through absence resulting from sickness. Stress has been linked to a wide variety of diseases and the European Foundation estimates that lifestyle and stress-related illness accounts for at least half of all premature deaths.

According to Thirumaleswari T. and Ragothaman C.B. (2013) in their study titled “A Comparative Study about the Managing of Stress by Women Nurses both at Private and Government Hospitals at Kanchipuram District” listed various factors relevant to stress - physical stress, work stress, social stress, psychological stress, family stress and environmental stress which are the important parameters that determine the type of stress and its influences on nurses.

Thirumaleswari T. and Ragothaman C.B. (2014) in their research article in the title “Quality Work Life Pattern of Women Nurses and its Influence on Patient Care Management – A Study with reference to selected Hospital in Chennai” identified that the career background like experience, type of hospital and income, influence Quality Work Life of nurses on patient care management with respect to working condition, work time/schedule, working environment, work place support, financial benefits, non-financial benefits, job security, work place attitude and work place safety.

2.13 Conclusion

In order to verify the background of the study, the reviews were taken from the aspects of study unit, area, backgrounds of nurses working in government and private hospitals, their personal background and their problems in general and occupational stress in particular. The reviews critically evaluated the background of hospitals and its functioning modes deliberately explained the stages of development of hospitals and the purpose of existence of hospitals. In addition to that the reviews related to hospitals also viewed the types of its operations, mode and delivery processes of its services. The reviews also correlated the status of hospitals in India and its functioning methodologies along with its categories of services.
The second part of the literature covered the aspects of service background and its characters in general and specifically about hospitals in various forms. It also dealt with the aspects of servuction process undertaken by hospitals along with the difficulties faced by hospital industries in present era to offer quality service to the patients.

The reviews also focused on the aspects of working nature of nurses in hospitals, the status and origin of nursing profession at various periods and also in various dimensions - the responsibilities held by nurses, their roles, their attitudes about their career chosen, opinion about career advancement and supports received in their present jobs. It also covered the aspects of opportunities and issues faced by nurses in the career. The women nurses, their status of occupation, choice of opinion about career of nursing, issues and opportunities faced by them in the present job.

The next part of review session covered the general aspects of occupational stress by employees in service sector, reasons, causes, effects and factors influencing them. The occupational stress in hospital industry and reasons for occupational stress in hospital industry, the causes and the ways to manage the occupational stress are dealt.

The final part of the reviews dealt about the background of occupational stress encountered by women nurses in hospital industry, while benchmarking the same on comparison with their personal background and career background. It also critically reviewed the aspects lead to occupational stress and its outcome on their personal, career, social, environmental and work related backgrounds. It also dealt about the facts of impact of occupational stress on their health aspects. In addition to that the present content covered the ways and means employed by nurses to manage occupational stress by personal, family and organizational supports.

The concluding part of the session outlines the need of different dimensional studies about the occupational stress related aspects in service sector especially in hospital industry and that to specifically about the servicing groups like doctors, maids and nurses. The reviews collected in the aspects of service sector, hospital industry and its functioning nature, role of nurses in general and women nurses in particular,
occupational stress of nurses in general and women nurses in particular, causes of occupational stress of women nurses, impact and strategies employed by them to manage occupational stress highlighted the existence of gap in the study of women nurses occupational stress and its impact on their work avenue performance, so the gap of influence of occupational stress of women nurses on their performance has been chosen for study by the researcher, moreover, the existing studies also showed that the impact of occupational stress of women nurses on their work related performance was not carried out by previous studies either at the level of state of Tamilnadu and the particular study location of Kanchipuram District. So the present study has been designed and carried out.

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About hospital industry as service sector


About Occupational stress


**Occupational stress of employees in service sector**


Occupational stress of women


Origin and Growth of Nursing


Occupational stress of nurses


**Occupational stress of women nurses**


Causes of occupational stress of women nurses


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**Outcome of occupational stress of women nurses**


Strategies to manage occupational stress by women nurses


