Introduction

Health is man’s greatest possession. It lays a solid foundation for his happiness. Good health is very essential for economic and technological development of an individual as well as the country at large. A healthy community is the infrastructure upon which an economically viable society is built and is a pre-requisite for human productivity and development.

‘Health’ is one of those terms which most people find difficult to define, although they are confident of its meaning. It means different things to different people. To some it may mean freedom from sickness or disease while to some it may mean the harmonious functioning of all body systems. It may be construed as a finding of ‘wholeness’ and a happy frame of mind. Many definitions of health have been offered from time to time. According to the Oxford English Dictionary health is “soundness of body or mind; that condition in which its functions are duly and effectively discharged.” A widely accepted definition of health given by World Health Organisation (WHO) (1948) in the preamble of its Constitution, states “health is a state of complete physical, mental and social well being and not merely an absence of disease or infirmity.” This definition is too broad and idealistic and is not an ‘operational definition’ so WHO study group attempted to given an ‘operational definition’ in which health is “a condition or quality of human organism expressing the adequate functioning of organism in given conditions genetic or environmental.”

Attainment of health is now accepted as a fundamental human right and is enshrined in the constitutions of most countries of the world. At the international level the universal declaration of Human Rights established a breakthrough in 1948, by stating in Article 25, “Everyone has the right to a standard of living adequate for the health and well-being of himself and family.” The preamble to the WHO Constitution also affirms that it is one of the fundamental rights of every human being to enjoy “the highest attainable standard of health.” Health occupies an important place for development of any state of world.
The developmental cycle of man depends upon intellectual calibre, curiosity and constructive thinking, but all of these qualities depend upon his good health and mental status. To meet this important need of healthy citizen of healthy society health services are one of the top priorities of public administration, which aims at social objective or rendering services to people. Health administration as a branch of public administration deals with all aspect of the health of people related to promotion of health, preventive services, medical care, rehabilitation, and the delivery of health services, the development of health manpower and medical education and training.

Public health administration can be defined as a science and an art of organising and coordinating government agencies whose purpose is to improve the physical, mental and social well being of people. The main purpose is the prevention of disease, preservation and promotion of health, which enriches the quality of life of an individual leading to his ethical, artistic, material and spiritual development and also to provide economic and efficient health services to people. To meet the objective of Health Administration, the Government of India has set up a separate Ministry of Health and Family Welfare which exercises the responsibility of formulating policies, planning new health schemes, offering financial assistance to state governments and also coordinating and giving technical help to state health departments. Though matters relating to health are the responsibility to each state, the Central Government plays a significant role in the nation’s health in assuming great responsibility in relation to health of the people. Coordination in matters related to health is achieved through Central Health Council. All State Health Departments are its members and the Union Minister of Health is the Chairman. It meets once a year to draft policy matters.

Since, health is a state subject so, at state level organisations, level of health services, public health laws and scales of pay for health personnel differ from state to state. The aim, however, of all states and the health administration is the same i.e. health, happiness and longevity of all the people. In order to achieve this aim the state health administration works through many departments, which deal with different kinds of services e.g. medical services, nursing services, dietary services, pharmacy services, x-ray services, laboratory services etc. Of all these services provided by the health administration, nursing services are the closest to the patient, as nurses remain with the patients 24 hours a day seven days a week.
Nursing personnel usually constitute the largest proportion of the health services. Importance of nursing services was highlighted for the first time in the Report of Health Survey and Development Committee (Bhore Committee) in 1946. It observed, “sickness and mortality can be halved by employment of properly trained nurses, health visitors and midwives in sufficient numbers. Although the doctors should be increased four folds, a corresponding increase in health visitor should be hundred time and midwives twenty times.” At the time the Committee finalised its report there were only 7000 registered nurses. The Committee recommended a ratio of 1 nurse to 500 people.

Later on the Shetty Committee (1954) was appointed to review the conditions of service, employment etc. of nursing profession under the Chairmanship of A.B. Shetty, Minister of Health, Madras, in pursuance of resolution passed at the Second Committee of Central Council of Health, held at Rajkot in February 1954. The Committee advocated availability of one nurse for three patients in teaching hospitals and one nurse for five patients in non-teaching hospitals, besides the appointment of a Superintendent of Nursing Services. The recruitment of nurses increased after the recommendations of this Committee. Thereafter Mudaliar Committee (1961) had suggested the same nurse bed ratio for teaching and non-teaching hospitals. However, these norms do not indicate whether the ratio includes staff required for Out Patient Department (OPD), Intensive Care Unit (ICU) or any other special units. These norms do not even indicate whether this implies a requirement for three shifts in which the nursing personnel normally work. Same norms were followed till 1986, when a committee was set up on Health Manpower, Planning, Production and Management under the Chairmanship of Professor S.S. Bajaj. As per the recommendation of the Committee the manpower requirement for Hospital Nursing Services is one nurse for three beds but in ICUs the ratio is one nurse per bed and for OPD one nurse for 100 out patients, while there should be 8 Ward Nursing Supervisors for 200 staff nurses and 7 Department Nursing Supervisors for 1000 beds. Along with these positions there should be 30 per cent leave reserve. Beside these, there should be one Deputy Nursing Superintendent for 300 beds and one Nursing Superintendent for 200 beds.

A year later, on August 25 1987, the Government of India constituted a High Power Committee for nursing and nursing profession. It released its report in March 1990. The Committee recommended that i) uniformity of employment procedures and
recruitment rules. ii) As per nursing manpower it has given almost similar recommendation and as Bajaj Committee recommendation i.e. for nurse bed ratio it has recommended 1:3 in teaching hospitals with 30 per cent leave reserve, for ICU 1:1 for 24 hours, for OPD and Emergency one nurse for 100 patient (1 bed is equal to five out patients) plus 30 per cent leave reserve. For Ward Supervisor or Nursing Sister it has recommended 1:25 beds plus 30 per cent leave reserve, one Assistant Nursing Superintendent for 150 beds, one Deputy Nursing Superintendent for 300 beds and one Nursing Superintendent for 200 beds. iii) It further recommended to the Indian Nursing Council and the State Council to amend the Council Acts for provision of a) more nursing members, b) timely inspection and follow up, c) maintaining minimum standards to private nursing homes, d) an approval of Indian Nursing Council before opening School or College of Nursing, e) Provision of renewal of registration every five years, f) independent practice of nursing by nurses and g) to set up a national examination system. iv) It has also recommended to the states to have separate Nursing Directorates. The total nursing component (Nursing Education, Nursing Service and Community Nursing) should be under control of nursing personnel at all levels. 

At present all the decisions regarding policy matters of nursing services are taken by Ministry of Health. There is a Nursing Adviser to Central Government who gives technical advice in relation to nursing services. In addition, there is Indian Nursing Council (INC) to assist and advise on matters of nursing education and services. At state level there is a position of Deputy Director (nursing), who directs the Nursing Services at the state level. She is a technical adviser to the State Government on matters concerning nursing. She is responsible for the working condition, training, leave regulation, evaluation of nursing services and plans for continuous improvement of job satisfaction of nursing staff as well as for better care.

Administration of nursing services in hospital is at three levels: base, middle and top level. All the three levels have administrative responsibility. At the base level bedside nurses are involved in intra-personal and interpersonal administration, middle level head nurses manage intra-departmental and inter-departmental aspects of interaction and at the top level, nursing administrators interact for intra agency and inter agency aspects of administration.
The main functions of nursing service administration are planning for total patient care, selection of nursing personnel, assignment of their activities, organisation of clinical activities, general information in relation to other departments, public relations, and after care of patients. Thus, we can say that nurses play an important role in successful completion of patients’ treatment and implementation of health programmes. Objectives of medical management and nursing care are same i.e. prevention of disease, promotion of health, early treatment and rehabilitation. It is pertinent to mention here that role of the doctor is limited to diagnose and prescribe treatment, whereas the role of nurse has a wider scope. Their functions include care and help the patient to take rest, assist him during discomfort, pain, prevention of complication, provide him health teaching, rehabilitate etc.

In order to meet the nursing functions a sound organisation is a pre-requisite, for which the first essential component of nursing administration is to formulate clearly defined objectives in accordance with the hospital policies. Based on these objectives an organisation plan is to be laid down which includes an organisation chart of nursing services, indicating the area of responsibility, to whom or for whom each nursing personnel is accountable.

Description of accountability and responsibility in the form of job description of the nursing personnel of all levels is to be clearly stated in written form. To have a standardized pattern of patient care written manuals of procedures need to be made available at their work place. This organisational plan is to be interwoven with the organisational plan of the hospital indicating inter as well as intradepartmental relationships. For successful implementation of the organisational plan, efficient functioning of nursing personnel is required, which requires adequate facilities, supplies and equipment. Nursing and hospital administration must evaluate periodically the adequacy of facilities in terms of patients’ and nursing personnel’s needs.

The efficiency of the nursing personnel includes orientation programmes, skill training, continuing education, leadership and management development. In order to have a check on efficiency of nursing personnel a well-planned system of periodical appraisal is required to be interwoven, while planning the organisation for providing health services. This also includes personal record of each employed nurse, according to hospital policy from the date of joining till leaving the job.
As evident from the above discussion nursing personnel work as a team, for which congenial work environment is required. For this purpose it needs the involvement of all level of nursing professional in planning and implementation of nursing policies so that manpower, money and material are utilised in a way to provide effective patient care. However, certain pertinent issues emerge, these being: Is this type of congenial work environment is available to nurses? Do nurses participate in policy-making, concerned with their profession? Are the nurses and their patient satisfied? Is there any difference in autonomous, private, and government hospitals regarding nursing services? These issues need to be investigated. Thus, it is felt that a comprehensive comparative study in this regard would be of great help to the administrators, organisers, planners and the educationists.

Review of Related Literature

Nurses' Job satisfaction and stress

Samuel BA (1974) explored the working conditions and nurses’ satisfaction in some Christian Mission Hospitals of Uttar Pradesh (UP). A total 118 nurses filled a 74-item questionnaire, which was divided into four main areas i.e. personal policies, physical facilities, equipment and supply and working relationship. Data related to personal policies revealed that nurses were satisfied with duty hours (46 hours a week), split duty, day off per month, annual leave (30 days), authority for responsibility, provision of in-service education, allowances (although less) and accommodation. But they showed dissatisfaction due to difficulty in getting day offs, annual leave, not getting compensation for extra duty they perform, not getting salary according to Central Government scale, not being aware of job description and mess food. Further, a closer view to physical facilities indicated that nurses were satisfied with generator facilities during electric break down and location of duty room in the ward. But they also showed dissatisfaction because of not having separate toilet for nurses in the ward, no separate place for nursing serious patients, no rest rooms and not having canteen and library facilities. Data related to equipment and supply revealed that nurses were satisfied with availability and condition of equipment, replacement of articles at regular intervals mending and replacement of linen periodically, availability of necessary furniture in the ward, type and height of beds. On the other hand, they were dissatisfied because of not getting sufficient linen, responsibility of person concerning losses and breakage and admitting more patients.
than allotted beds, in the ward. Analysing data on the basis of working relationship, it was evident that nurses were satisfied with co-operation of doctors, fellow nurses, patients, community and paramedical staff but they were dissatisfied with lack of co-operation by Class-IV employees. McCloskey Joanne Comi (1975) explored the rewards that keep nurses in job. Ninety-five nurses who left the job in previous four months in 13 randomly selected hospitals in Chicago and San Francisco completed the mailed questionnaire. Analysis of the data revealed that younger nurses and nurses with less than six months of experience had more turnovers. Those nurses who could not be influenced left the job because of moving, retirement, illness and excessive travel distance to the hospital. Other nurses, who left the job because of pregnancy, travel, further schooling, for family or personal reasons or because of job dissatisfaction might have held on to the job had they been offered more rewards. The group of rewards which respondents rated as most important for keeping them in job were, more opportunity to attend educational programs, continue course work that would earn credits for the next degree, career advancement other than assisting Head Nurse and more recognition for their work from peers and supervisors. Other rewards, which were rated as very important were, more nursing research on the unit, three more weeks of paid vacation each year, more straight day shift, additional job responsibility, more help from peers and supervisors in improving job skills and more recognition for good work. Part time work and childcare rewards were very important for nurses with young children. Nurses who left one job for another, experienced more self esteem in their new jobs than they had in their old ones. These nurses felt that former co-workers and supervisor had done little to increase their self-esteem.

Joshi and Dubey (1976) aimed to find out the personality dimensions and factors affecting job satisfaction of nurses. One hundred and fifty nurses in the 20 - 39 years age group from Nehru Hospital, PGIMER, Chandigarh, constituted the sample. Eysenck Personality Inventory was administered to them to assess personality dimensions. A semi-structured questionnaire was administered to obtain demographic characteristics and job satisfaction and factors such as physical-need satisfaction, wage satisfaction, ego-need satisfaction, and relationship with supervisor and individual job satisfaction and working relations. Data revealed that nurses have shown low satisfaction on three counts i.e. ego-need satisfaction, relation with
supervisors and individual job satisfaction. On other hand, the aspects they have shown highest satisfaction is wage satisfaction. High satisfaction was also reported on working conditions and on physical-need satisfaction.\textsuperscript{14}

Jayalakshmi D (1980) studied nurses' role performance and its determinants with reference to comprehensive nursing care. The findings demonstrated that functions of nurses related to direct patient care i.e. meeting physical, social, psychological, spiritual, economic, vocational and educational needs of patients were not adequately performed. There were some other nursing functions which indirectly related to patient care i.e. meeting supplies and equipment, carrying out clinical functions and house keeping which were more adequately performed because of pressure from hospital authorities to perform these functions without fail. Some direct activities under physical needs i.e. general hygiene, giving injection, medication and dressing, psychological needs i.e. providing information about procedure, creating positive approach, educational needs i.e. teaching relatives regarding continuity care of patients were directly demanded by organisations and were regularly performed. Other activities like social, psychological and educational needs of a patient were perceived positively by nurses, but occasionally performed due to lack of role demand. Hence, role performance was determined by role demand. Lack of regularity in role performance also accounted for lack of adequate time and lack of adequate nurse patient ratio. However, lack of role facilities was not solely responsible for lack of regularity but they were also reinforced by lack of role demand.\textsuperscript{15}

Parasuraman Saroj \textit{et al} (1982) examined simultaneously the influence of primary versus team nursing care and shift assignment on the perceived work experience and job attitude of 327 nurses of a large metropolitan hospital. Data indicated that only one stressor i.e. inter-shift problem was greater in team care units than in primary care units. In contrast to it, stress was reported to be higher in primary care units as compared to team care units. The figures indicated that the second shift accounted for a large part of the between shift variation in stressors. Work overload, inter-shift problems and resource inadequacy were perceived to be more severe in the second shift than in the first and third shift. The third shift reported lower levels of both inter unit conflicts and role frustration than the first and second shift. Examination of the differences in felt stress by shift revealed that felt stress was lower in the third shift than in the first two shifts. Congruent with this, the third shift
reported the highest level of organisational commitment, while the commitment was lowest in second shift. Hence, work stressors were not randomly distributed, within the nursing work environment. They vary systematically among work shift and to lesser extent according to the type of care employed in different units.¹⁶

Chiriboga David A et al (1982) tested an analytic model on stress and coping among 100 hospice nurses from 20 facilities. Findings indicated that hospice nurses who reported fewer experience, prior to entry, have higher work stresses. Those who saw themselves as having more comfortable financial status seemed to do better. Nurses who had the most favourable outcome had employed a professional orientation as a coping style, expressed their emotional responses to job related stresses and resorted to more cognitive or rational coping strategies. Further, nurses who found their spouses and the staff to be supportive seemed to have most favourable outcome. Somewhat surprisingly, however, the presence of supportive friendship was not related to outcomes. Social factors of marital status, age and education did not affect overall outcome. Predisposing factors such as motivations for joining the hospice organisation (personal, career oriented, mixed), prior experience with hospice organisation and exposure to the death of close ones also did not affect the over all outcome. However, within this set, exposures to death of close others predicted less favourable outcome. Nurses who did not admit that hospice situation was stressful may encounter difficulties in trying to achieve satisfactory adaptation. Of individual measures the most effective coping style was the sense of professionalism. On the other hand, the use of emotional avoidance as a strategy tended to be associated with less favourable outcome.¹⁷

Murray and Morris (1982) compared the degree of professional autonomy among nursing students by a self administered questionnaire to 224 senior nursing students i.e. 80 from associate degree program, 85 from diploma programme and 59 from the university programme (baccalaureate). Upon examination of results, it was apparent that senior nursing students in baccalaureate program scored significantly higher on a scale of professional autonomy than students from either the diploma or associate degree program. The baccalaureate students retained their lead in the measure, regarding patients’ rights. The associate students differed significantly from diploma students in their rejection of traditional role limitation, but the difference between the latter and the baccalaureate students was not significant. Hence,
baccalaureate graduates were creative and spontaneous in terms of professional autonomy.18

Jinadu and Jaiyeoba (1983) studied the motivating factors among nurses in Nigeria administering a five page self-administered questionnaire to 96 nurses. The results show that the majority of nurses who wanted to leave nursing profession in the near future were those, who perceived the system of rewarding performance in the form of promotion, as being unjust. Those who did not want to leave nursing in the near future, perceived fairness and length of service influencing promotion. There was no significant difference in the perception of fairness promotion exercise between this group of nurses and those who did not wish to change their occupation in the near future. Further, there was no significant relationship between length of service of nurses and their desire to leave or not to leave, nursing in near future. Each nurse told one motivator and hygiene story, respectively, from which one motivator and one hygiene factor was extracted. Among the motivator factors, ‘Achievement’ (63 per cent) dominated the periods when nurses felt exceptionally happy with their job. ‘Recognition’ (16.4 per cent) followed achievement as motivator. The ‘work itself’ (6.8 per cent) and ‘responsibility for work’ (4.1 per cent) ranked third and fourth, respectively. Among factors leading to job satisfaction i.e. hygiene factors ‘hospitals policy and administration’ accounted for 55.3 per cent. This was followed by ‘working conditions’ (30.5 per cent), ‘supervision’ (5.9 per cent) and ‘interpersonal relationship’ (2.3 per cent).19

Bergman Rebecca et al (1983) examined staff composition, job perceptions and work retention of nursing personnel in 12 geriatric institutions in Israel. Total 82 unit-nursing personnel and 39 key staffs were interviewed. Data related to patient care hours revealed that mean care hours (x=2.33) were in line with Ministry of Social Affairs recommendations (2.0 – 2.5). Whereas, Registered Nurses care hours were much below the standard in all cases. In five units there were no Registered Nurses. The combined Registered Nurse and Licensed Practical Nurse hours were only one third of total hours, which was lower than the recommendations. On questioning about job related questions nurses responded that reason for job selection were mainly two factors i.e. the altruistic factors – want to help others (x=3.6) and pragmatic factor – need of money (x=3.3). Only 6.2 per cent were planning to leave the job. Further, when asked if job met their pre-employment expectations 58 per cent staff reported
that staff found it as expected and a quarter of them believed that it was better than anticipated and the job expectation fulfilment was highest among Licensed Practical Nurses although not significant. More than half (53.3 per cent) believed that if they leave they could get better job while 12 per cent believed that they will not be able to get another job. On asking about self-perception and the job the responses showed that staff felt that job needed knowledge, skill and special attitudes but the institute was not providing facility for job enrichment, the only source of growth was past experience. They further felt that they have job autonomy and an influence on the decision-making. In the meantime staff felt that working with aged was physically as well as emotionally stressful. The mean staff attrition rate was 35.4. This was found to be relatively low and concentrated in first year of employment. Reasons for leaving were not related to job (50.4 per cent) but family reason, ill health of self or family, end of temporary employment, to continue education; employer dissatisfaction (43.9 per cent) i.e. bad attitude to patient, competence level, negligence, quarrel with staff, absenteeism, immoral and language problem; staff dissatisfaction i.e. found better work condition elsewhere, low job satisfaction, not ready to work during nights, low salary or unchallenged work. 20

Sellick Kenneth J. et al (1983) evaluated the effects of primary nursing on staff satisfaction. Primary nursing is an organisational system of care, which emphasizes the delivery of comprehensive, individualized, and continuous nursing care through the nurse with the authority and autonomy to plan and implement such care. The study was conducted in a large, acute medical and surgical hospital in Melbourne. Two general wards were selected and nurses working in both units were selected for the study - 17 from experiment group and 20 from control group. Primary nursing care was introduced to experimental unit for a trial period of six months and during last 12 weeks of study staff satisfaction scale was administered to selected nurses. Results showed a significant difference in favour of primary nursing. Nurses from experiment group were satisfied with their job in terms of opportunity to accomplish something worthwhile, to voice opinion and participate in decision-making and to set the pace of their work. 21

Moores Brian (1983) conducted a time study to ascertain whether patients in the different categories received significantly different quantities of nursing care at Johns Hopkins Hospital. Findings revealed that patient categories as 'Intensive Care'
received five times as much nursing care as the self-care patient needed. The remaining group labelled as partial care received twice as much base line group. So it was in ratio of 1:2:5 in self-care, partial depending and intensive care patients. This dependency ratio will help in nursing manpower planning in the hospitals.

Duxbury Mitzi L et al (1984) tried to relate leadership style with staff nurse burnout and job satisfaction. The authors had defined leadership style as a two-factor construct composed of consideration and initiating structure. Consideration indicated a relationship with subordinate which was characterised by mutual trust, respect for ideas, consideration of feelings and two way communication whereas initiating structure indicates degree to which leader undertakes an active role in directing activities of work unit by planning, scheduling, criticizing and monitoring. Findings of the study revealed that Head Nurse consideration was clearly related to Staff Nurse satisfaction ($r=0.55$, $p<.001$) and less to burnout ($r=0.29$, $p<.001$) whereas Head Nurse initiating structure alone related neither to satisfaction nor burnout. But structure had clear effect by combination with consideration. If Head Nurse ranked high on consideration Staff Nurse burnout and satisfaction was not observed regardless of Head Nurse structure score. High consideration low structure and high consideration high structure were not significantly related to burnout and satisfaction. Low consideration did not negatively influence Staff Nurse burnout or satisfaction if coupled with low structure. But the low consideration and high structure group was most deviant. In this leadership style Staff Nurses were more burned out. The low consideration and high structure Head Nurse group was significantly different on satisfaction from all but the higher consideration – high structure group.

MacLeod Mike (1985) studied the time nurse spent on non-nursing duties other than direct nursing. It was estimated that annually strategy Abbots hospital had spent £ 130,000 of its nursing budget on paying nurses to perform non-nursing duties. A three quarter of an average time of nurse i.e. whole time equipment (0.74 WTE) per week was spent on non-nursing duties in acute assessment and rehabilitation ward and 0.69 WTE per week was spent on non nursing duty in continuing care ward. There non-nursing duties were related to laundry, domestic, pottering and catering which registered nurses auxiliary nurses who were paid less than registered nurses could do.
Taylor and Covaleski (1985) examined the predictability of internal job transfer and turnover behaviour from nurses’ career plans, work values and job satisfaction. One hundred and sixty staff nurses from 21 units of a university hospital in the Midwest completed the questionnaire. Results indicated that nurse’s job satisfaction was relatively poor indicator of whether they subsequently remained in their position. Nurses who accepted transfers during research period and those who chose to leave the job did not differ significantly in job satisfaction from those who remained on the job. Further, values and career plans rather than job satisfaction were found to discriminate between persons who remained in their job, accepted transfers or turned over within a one-year research period. As the nurses who planned to leave within a year planned not to work on graduate degree besides nursing in next five years and to work only in the home. Whereas transferred nurses had a plan to complete their graduate degree in nursing in next five years. They had lower values for friendly, social relationship and loss of co-workers and more professional involvement in nursing.

Jones Keith (1985) studied nursing manpower levels and budgetary cash limit system. A staff-leaving job was considered wastage. Number of nurses left each month by whole time equivalent rate (WTE) was calculated. After 12 months annual total was determined and dividing by 12 to give monthly average for that year, it was found that 3.2 WTE trained staff leaving per month – total 38-40 wastage a year. This kind of exercise was helpful for nursing administration for manpower planning.

Norbeck JS (1985) tested a theoretical model of social support, occupational stress and health. LaRocco, House and French (1980) developed this model in relation to job stress in critical care nursing. A questionnaire was filled by 164 nurses of female critical care units from eight hospitals in an urban-suburban area of Northern California. The questionnaire measured four variables i.e. perceived social support, perceived job stress, job dissatisfaction and psychological symptoms. In addition to this, specific types and sources of social support were also examined. Findings indicated that age, experience in nursing, experience in critical care and shift were significantly related to one or more of three outcome variables i.e. perceived job stress, job dissatisfaction and psychological symptoms. The reported psychological distress in this sample reached clinically significant levels. Marital status of nurses did not impact any of study variables. Based on theoretical model, all the main effect i.e.
first three hypotheses were significantly supported from full sample i.e. i) Social support was negatively related to perceived job stress, job dissatisfaction and psychological symptom. ii) Perceived job stress was positively related to job dissatisfaction and psychological symptoms. iii) Job dissatisfaction was positively related to psychological symptom. iv) Interaction of social supported and perceived job stress was not significantly related to psychological symptoms. v) The interaction of social support and job dissatisfaction was not significantly related to psychological symptoms. Further, data related to sources of social support indicated that for married group a specific type of support i.e. work support explained 24 per cent of variance of perceived job stress; nearly double that of over all social support measure for this group. For unmarried group specific sources of support i.e. from relatives explained 10 per cent of variance in perceived job stress and 16 per cent of variance in psychological symptoms – double or triple the effect of the total network support score for the full sample.27

Astbury Charmian (1986) explored some aspects of stress experienced by qualified nurses on operating days. Observation and unstructured interview were used to collect the data in four health authorities (H1, H2, H3 and H4). Results revealed list inaccuracies related to stress in the theatres and poor management of time related to stress in the ward. The reason these different measures included preparation for the former and need for pre-medication in time for the latter. It was further reported that health authority (H2) had worst managed routine operating time, the worst record of list alteration, lowest staff satisfaction and highest level of stress. H3 health authority recorded highest stress levels for theatres and had a severe under use of planned theatre time. Health authority (H1) scored highest on satisfaction, managed their use of theatre time well, and never had more than one alteration on a list. Hence, satisfaction was low when stress was high and vice versa.28

Metcalf Claire A (1986) conducted an experimental study to see the effects of organisational change in the system of organisation of delivery of nursing care from a task-oriented system to patient allocation system on job satisfaction of nurses in a maternity hospital of Ireland. A questionnaire on job satisfaction was administered to 22 nurses and 32 nurses in pre and post periods respectively in pilot, control and research wards. The questionnaire had five factors i.e. factor – i) psychological needs, factor ii) patients allocation, factor iii) independence, factor iv) autonomy and factor
v) influence. Results indicated that greatest change in job satisfaction had occurred during post change period in pilot and control ward. In pilot ward, high satisfaction increased and low satisfaction decreased whereas in control ward low satisfaction had increased and very little but not significant difference in the research ward between pre and post change period. Taking into consideration job satisfaction separately, difference observed in factor – ii) patient allocation factor, between the wards and between the pre and post change period. While related to factor - iii) independence factor there was significant difference between the ward and no difference between the pre and post change. Whereas, no significant difference related factors iv and v either between the ward or between pre and post change period. It showed that factors i, ii, iii, iv and v i.e. responsibility achievement, challenge level of decision making and amount of supervision were unrelated to the system of patient allocation. Nurses did not like idea of the new patient allocation system during pre change period but they liked it during post change period. Open ended questions like what do you like most about your work fell into three categories i.e. aspects related to nurse – feeling of person well beings, aspects related to patients – giving care to mothers and babies and contextual aspects – good staff relations. Result indicated that in control wards the responses relating to patient remained high in both pre and post change period. In pilot ward and research ward responses related to patient were high in pre change period, but in post change period responses dropped comparatively. Responses related to nurses had risen in all the wards in post change periods whereas responses related to good staff relations had risen only in pilot ward and research ward in post change period. Responses related to ‘what gives you most sense of achievement at work’ showed that in both pre and post change period majority of respondents gained most of their sense of achievement from their contact with patient.29

Ahmadi Kate S. et al (1987) examined newly hired hospital Staff Nurse’s professionalism, satisfaction and alienation. This was a follow up report of a previously done study, where a questionnaire was administered during the orientation course of 3-4 weeks to new graduates, after having been hired by a large North-Eastern urban teaching medical centre. After a year the questionnaire was re-administered. It was observed that between the time of hire and a year later, the mean bureaucratic and professional role conceptions, professional role discrepancy and job satisfaction remained essentially unchanged. Here the meaning of professional role
concept was orientation towards maintenance of occupation group standard while bureaucratic role concept referred to orientation towards specific position in complex organisation, and role discrepancy mean summed differences between nurse’s judgment about how real and ideal given nursing situations were. Alienation was workers’ experienced powerlessness. During this interval, however, mean bureaucratic actual situation, bureaucratic role discrepancy and alienation increased, while professional actual situation and importance of job factors decreased. Although less consistently supported, many other co-relational relationship of interest was also found. At the time of hire, age was related to both bureaucratic actual situation and role discrepancy, but negatively related to professional actual situation. Thus, bureaucratic and professional actual role situation may operate in opposition. Length of stay at termination was, somewhat puzzling, negatively related to both bureaucratic role conception and actual situation. Job satisfaction was negatively related to professional actual situation and positively related to professional role discrepancy. A year after hiring bureaucratic and actual situation was strongly related to both professional role conception and negatively to professional role discrepancy, while bureaucratic role discrepancy was related to professional role conception and negatively, to both professional actual situation and role discrepancy. As previously, job satisfaction was negatively related to professional actual situation, but positively this time. Hence, a year later data showed relationship changes. Now role conception was not related to alienation but job satisfaction. The more dissatisfied a nurse was more alienated. In addition, the mean score increased over the year.30

Firth Hugh et al (1987) viewed professional depression, ‘burnout’ and personality in 200 nurses from three large psychiatric and mental handicap hospital and the medical units of three general hospitals by self-administered questionnaires. The result suggested much similarity between emotional exhaustion and ‘professional depression’. However, professional depression was found to be distinguishable from a number of different experiences reported by nursing staff, including avoidance of problems, ‘depersonalisation’, emotional draining or lack of accomplishment. Ambiguity about supervisors’ expectations and success in meeting such expectations were associated with increased scores on each of these variables. Personality appeared to be related to staff’s responses. Staffs prone to direct hostility ‘inward’ on themselves were more likely to show avoidance of problems and decisions. Those
staff prone to direct hostility ‘outwards’ was more likely to report on awareness of
depersonalisation toward others. Both these processes may in different ways affect
patient care and relationship with other professionals. Further, the role ambiguity
experienced by the staff had a strong and highly significant relationship to staffs’
profession score and to their reports of avoiding decisions, problems of changes. Role
ambiguity was related to lack of personal accomplishment, emotional draining and
depersonalisation.31

McCranie et al (1987) studied work stress, hardiness and burnout among
hospital staff nurses in 107 registered staff nurses from an urban community hospital
who responded to a self-administered questionnaire. Results indicated that burnout
scores were not significantly associated with age, years of nursing experiences,
marital status, type of nursing education, or clinical work setting. However, nurses
working in shift schedule exhibited a significantly higher score on the burnout scale
than nurses working in straight shifts. Burnout was also significantly associated with
higher levels of perceived job stress and lower level of personality hardiness.
Hierarchical multiple regression analysis further indicated that work stresses
(particularly work load) and hardiness were significant additive rather than interactive
predictors of burnout. Researchers concluded that hardiness had beneficial effect in
reducing burnout, but did not appear to prevent high levels of job stress leading to
high levels of burnout.32

Adey Cheryl (1987) viewed stress as occupational hazard among nurses and
investigated, ‘where did nurses seek support from when pressure was on’. Questionnaires were distributed among nurses of general range of wards. Results revealed that 16 per cent suffered with stress symptoms most of the time and 77 per cent suffered infrequently. Most common causes of stress were reported to be staff hostage. Other causes were patients having uncomfortable/unnecessary treatment, heavy work load, faulty equipment, death of liked patient, rude/aggressive patients/relatives, lack of equipment, starting new wards, breaking bad news, patients asking difficult questions, job responsibility, responsibility with doctors, very sick/dying patients, hospital policies and procedures, relationship with ward colleagues. On asking about seeking support when the pressure was on most of them said they turned to colleagues. Most of nurses (10 per cent) felt that hospital did not help with stress problems and 92 per cent of them felt that there was need for a
counselling/welfare services. Further, regular meetings with all grades of staff where
views could be shared in relaxed and informal surroundings could help in achieving
good teamwork of 28 per cent nurses who had these meetings. More than half (52 per
cent) nurses felt that meetings were beneficial and 68 per cent felt that meetings were
necessary.33

West and Savage (1988) studied stressors, job related needs and job
satisfaction of Health Visitors by interviewing 92 Health Visitors working in a city
health authority. Their reaction was compared with 30 other workers in variety of
occupations. The results indicated that Health Visitors were significantly more
dissatisfied with supervisor, less than half expressed dissatisfaction with degree of
report and fair treatment, support and guidance and over all quality of supervision
they received. Equally worrying was the very few per cent who expressed satisfaction
with career development and in-service education opportunities at work. Further
probing revealed that they perceived their role being uncomfortably ambiguous. They
felt that clear, planned goals and objectives did not exist for their jobs. Explanation of
what was expected from them was not clear. Health visitor’s role ambiguity score was
significantly higher than hospital nurses, hospital employees and senior hospital
administrators. Further examination revealed that 40 per cent did not know whether
their work was satisfactory and 45 per cent said they often had trouble figuring out
how well they were doing. Overload of work was the problem frequently discussed by
Health Workers. Ninety per cent of them described their work-load as ‘great’ or ‘very
great’ on standardised scale used to measure work-load. Further another 88 per cent
said that they had little time to think and contemplate their work. The work-load score
was significantly higher than senior administrators, engineers and scientists in an
aerospace organisation. Regarding ‘freedom at work’, Health Visitors felt that they
had quite a lot of freedom to act independently but it was significantly lower when
compared to 766 female managers in British Industry. The results related to self-
administered screening test for detecting psychiatric disorders showed that 44 per cent
of Health Visitors scored at or above cut off score recommended. This indicated
significant emotional stress. The major causes of stress reported were work-load,
difficult cases and feeling of inadequacy and lack of support from management. But
the questioning about job satisfaction revealed less depressing side to Health Visitors.
The major source of satisfaction was contact with clients, greatly where good relations
had developed. They derived satisfaction from giving advice, support and guidance for parents of babies and seeing its practical benefits. Colleagues were also an important source of satisfaction at work. Other sources of satisfaction were autonomy, freedom, independence, Health Visitors’ role, health education component and a vision of the role as improving the well being of the whole community. Further, a more modified version of questionnaire distributed in another area of the country revealed similar findings suggesting that results were due to nature of health visitors’ role and the organisation of community nursing. Over all results suggested a professional working under great pressure, which was adversely affecting well-being and effectiveness.\textsuperscript{44}

Topt Margaret (1988) investigated noise – induced occupational stress and health in 100 critical care nurses from two large university affiliated hospitals. Life experience survey was used to measure life stress in the nurses and modified version of the twenty-four items Disturbance Due to Hospital Noise Scale (DDHNS) was used to assess stress caused by hospital sounds. Further, Staff Burnout Scale for Health Professional (SBS-HP) was used to study job dissatisfaction; psychological and interpersonal tension and unprofessional patient relationship. Findings indicated that great degree of noise-induced stress was linked with a greater degree of health problems i.e. headaches. Further, when greater noise-induced stress combined with greater sensitivity to noise, greater score for headache were evident. Further, noise-induced stress was associated with greater degree of burnout in critical care nurses, irrespective of noise sensitivity. Noise sensitivity nurses proceeded beyond burnout to respond with physical symptoms.\textsuperscript{35}

Wolfgang Alan P (1988) studied the job stress in the health professions. A questionnaire of demographic items and Health Professions Stress Inventory (HPSI) was mailed to 3105 health professions. Out of them 379 registered nurses, 379 pharmacist and 291 primary care physicians returned questionnaires. Results indicated that mean score of nurses was $61.2 \pm 14.2$, for pharmacist $56.0 \pm 15.1$ and for physician $46.9 \pm 13.1$ i.e. nurses reported the highest levels of stress. In contrast to physicians and pharmacist, nurses had significantly higher mean stress score on 17 out of the 30 items of HPSI. While these item cover a variety of stressors, three broad categories of job situations were represented i.e. i) Work over load due to
understaffing, ii) Conflicts – as nurses reported significantly greater stress in conflicts with supervisors and co-workers, disagreements with other health professionals and lack of respect from the public, iii) patient needs including items related to essential needs of patients, treatment of terminally ill patients and allowing ones personal feelings to interfere with patient care. Further, it revealed that pharmacists and nurses’ perceived frequent stress in supervision of co-workers, lack of recognition from health professionals, poor advancement opportunities, inadequate feedback on job performance and inability to use all of one’s abilities on the job.36

Prestholdt Perry H et al (1988) studied the reasons of nursing turnover by asking the nurses to fill the questionnaire who had resigned six months before. Findings revealed that 14 per cent nurses left their hospital position during the six months of study, which would amount to an annual turnover rate of about 28 per cent. Reason for turnover were stated as to continue their careers in professional nursing, to join another hospital, temporarily leaving job market, having a baby, devoting time to their families, obtaining further education in nursing, and transfer or relocation of their spouse. The factors contributing to turnover were grouped under nurses’ attitudes, social pressure and moral obligation to the hospital. Findings also identified four categories of beliefs about consequences of resigning or staying on job i.e. beliefs related to nursing practice, extent to which a nurse’s present position versus an alternate one, intrinsic rewards associated with nursing practice; beliefs about working conditions and environment at present hospital including salary, benefits, and scheduling outcome; belief related to personal attitude about resigning or staying at hospital.37

Landeweerd and Boumans (1988) compared nurses work satisfaction and feelings of health and stress in three psychiatric departments differing in type of work i.e. admission, short stay and long stay. Sixty-five nurses were interviewed and filled the questionnaires. From the results it was observed that satisfaction scores were relatively high in all the departments. The two variables with highest scores were internal work motivation and experienced meaningfulness. The two variables with lowest scores were clarity satisfaction and supervisory satisfaction. The three departments differ significantly on feedback, supervisory satisfaction and general work satisfaction. The next three variables approached the significant level rather closely were experienced meaningfulness, growth satisfaction and clarity satisfaction.
It was further reported that admission department had the highest satisfaction score on each of six variables and short stay department received lowest score on four of these variables. The results of interview showed that there was severe lack of positive feedback to nurses in the short stay and long stay departments. The lack of clarity in demand, treatment and outcome was also often mentioned for the short and long stay departments. Data related to perceived health and stress indicated significant differences in three departments with regard to health 'complaints' and stress feelings. The score in the short stay department in each case were most negative. Judging from interviews, the relatively high stress reported in short stay department due to external pressure from the admission department to take in patients, the impossibility of transferring patients to other departments, the monotony of work situation and of drabbing with a patient population with no positive prognosis and the small amount of positive feedback from patients.38

Hare Jan et al (1988) studied predictors of burnout in 156 professional and 156 para-professional nurses working in three acute care hospital and seven nursing homes. Findings revealed that the variables of primary importance in predicting burnout were the work relationship index, tension-redressing coping and instrumental problem focused coping. Instrumental and tension releasing coping strategies were particularly powerful in predicting depersonalisation and personal accomplishment while work relationship index was particularly powerful in predicting emotional exhaustion. Those variables of secondary importance in predicting burnout in nursing staff were comfort working with patient with poor prognosis for survival, informal support, fear of death and personal demographics. At least one of these four variables appeared as a significant predictor for five of the six dimensions of burnout.39

McCloskey and McCain (1988) viewed strengths and weaknesses of nurses' performance by comparing four sets of performance data from two studies in which the same instrument was used i.e. Head Nurses ranking of Staff Nurses' performance was compared with the Staff Nurses' own ranking. Results indicated that nurses irrespective of education level or experience or unit type, shared some of the same perceived strengths and weaknesses. Staff Nurses perceived that they were better at leadership than their Head Nurses. This indicated over confidence on the part of Staff Nurses, or Head Nurses' under-value, the ability of Staff Nurses in this area. On the other hand, most of the Staff Nurses ranked their performance in critical care skills
rather low, whereas, Head Nurses ranked them higher in this area. This indicated that Staff Nurses lack confidence in ability to work with mechanical devices. The specific skills which nurses perform well were used daily in the hospital routine. This included technical procedures such as suctioning, intravenous therapy and dressing changes. Staff Nurses ranked themselves high on this skill and Head Nurses agreed to it. On the other hand, bottom ranked skills were teaching, collaboration; planning and evaluation skills, which involved family, community and innovation, were difficult skills to learn.40

Owen Sara (1989) studied whether trained psychiatric nurses used the organisational coping strategies offered by Moodsley Hospital London to deal with work stress. These were weekly staff support groups; in-service study day; a policy encouraging staff to hold supportive discussion groups following violent incidents or other untoward incidents, such as death of patient or suicide; career advice by tutors; supervision and appraisal for all trained staff by their superiors. A sample of 46 trained psychiatric nurses at the hospital was sent questionnaires. Results indicated that most people attended weekly staff support groups and found them useful. Similarly, the policy holding a supportive discussion group following violent incidents was also frequently adopted. The in-service study days had been attended by less than half of respondents. But of all those who attended in-service study day most of them did not find them useful way of relieving stress. Most respondents were unaware that they could seek advice on career development from tutors and over half of respondents did not receive any supervision or appraisal report of their work. The results of study suggested that trained nurses did not find the organisational coping strategies useful apart from support groups. The most unexpected finding was the paucity of supervision and appraisal received by the nurses.41

Nagarathamma B., (1989) studied job satisfaction of 300 nurses working in Government Teaching Hospitals. Findings revealed that tenure of service as well as age was not related to job satisfaction.42

Kramer and Hafner (1989) conducted a nationwide study on impact of shared values of Staff Nurse job satisfaction and perceived productivity in 24 hospitals. Total 2297 Staff Nurses completed a packet of questionnaires. Two-way ANOVA indicated that top managers, clinical experts and Head Nurses did not hold the same job values for Staff Nurses as Staff Nurses held for themselves. There were also significant
differences in work values by hospital group but no significant interaction effect between members and hospital groups. It was further reported that Staff Nurses and clinical experts had more value congruence as compared to that of Staff Nurses and Head Nurses. A significant inverse correlation was found between value congruence and nurses’ job satisfaction and quality care. Explanation of the finding centred on recent role changes for Staff Nurses and Head Nurses, power differentials and evolving clarity to the Staff Nurse role. A serendipitous finding was that Staff Nurses reported fewer factors as important to their job satisfaction and perceived environment conducive to quality patient care as compared to other members of the nursing department.43

Chaubey and Sarma (1989) studied job satisfaction and nurses’ turnover. A questionnaire was administered to 22 nurses who left the hospital for personal advancement; want of family quarters and for job dissatisfaction. The findings revealed that younger age group nurses (23-26 years) had more turnover. Others who left the job were unmarried (80 per cent), having no dependents (61 per cent) and served less than 1 year (69 per cent). The study reported the positive points such as famous hospital, happy with professional work, by and large no non nursing duty, enough authority to carry on responsibility, not unhappy with salary structure, provision to receive and accommodate female guests, good interpersonal relationship, good guidance from Ward Sister, satisfactory linen laundry service and prompt health care during sickness. Further, the study also reported the negative factors such as lack of sufficient avenues for promotion, lack of learning programme, no job description, unsatisfactory food and hostel affairs, lack of family accommodation and no periodic health check ups.44

Mueller and McCloskey (1990) have originally developed a thirty three items scale to measure three dimensions of nurses’ job satisfaction i.e. safety rewards, social rewards and psychological rewards. The scale was subjected to series of checks of design to determine the number of dimensions being measured along with the reliability and validity of the scale. Although the hypotheses of only three dimensions were not supported, the eight interpretable factors could place within three dimensions. These factors were satisfaction with extrinsic rewards, scheduling, family/work balance, co-workers, interaction opportunities, professional opportunities, praise and recognition, control and responsibility. This scale was
administered to one hundred and fifty nurses and mid-western hospital in Iowa City. Internal consistency and test re-test reliabilities were 0.89. Construct validity was also examined and the correlation of eight MMSS scales with intent to stay on job was \( r=0.82 \).45

Tyler Patrick A et al (1991) compared nurses in public and private sector with regard to occupational stress and its sources and self-reported health well being. Both groups reported similar high level of stress experience, most noticeably arising from high work-load and the experience of death and dying. Group difference did emerge from an examination of source of stress. Public sector nurses were more troubled from high work-loads whereas private sector nurses reported ‘uncertainty over treatment’ and ‘conflicts with doctor’ as a more frequent source of stress. Level of self reported mental and physical health symptomatology did not differ between groups. However, ‘social systems’, ‘anxiety’, social dysfunctions and severe depression correlated significantly with each other i.e. overall nursing stress score and symptomatology were significantly correlated, and work load was the best independent predictor of health and well being status. Hence, excessive work-load was the primary cause of ill health and psychological disorders in nurses, regardless of whether they work in the public or private sector.46

Astrom Sture et al (1991) examined the staff burnout in relation to empathy and attitude among 60 nursing staff in geriatric and psycho-geriatric care by studying them in two occasions after the gap of one year by administering a questionnaire and a semi structured interview was also prepared on the second occasion. The results indicated that figures of experience of burnout among Staff Nurses were slightly lower in second time. However, considerable number of staff was at risk from developing burnout. Their empathetic ability was moderately high and increased after one year while attitude of staff remained unchanged. No differences were found regarding staff’s age, place of work, or time at present place of work. As far staff’s empathy, there was no difference with respect to sex, category of staff or place of work. Registered Nurses showed the most positive attitudes towards demented patients at both times and differed compared to the Nurse’s Aids and License Practical Nurses. Burnout correlated with lower empathy and less positive attitude of staff. It was further reported that the experience of feedback at work and time spent at present place of work were the most important factors when explaining burnout among the
staff. Staff with high empathy experience, 'a close contact with patient' was the most stimulating factors. The importance of counteracting burnout in the care of demented patients is stressed.47

Gardner Kathryn (1991) compared primary and team nursing. Study was carried out in four years in three phases i.e. One pre interventional phase and two post interventional phases: one after 12 months and other after 30 months. Finding indicated that primary nursing produced higher quality of nursing care then team nursing. It was further shown that once the primary nurses became comfortable with the new system their stress level score dropped and was not greater than team nursing. In addition, Staff Nurses with more education were retained longer in primary nursing setting than in team nursing. Furthermore, findings illustrated that primary nursing delivery system reduced the cost.48

Ehrenfeld M (1991) studied job satisfaction and work related stress of nurses within the Israeli Intensive Coronary Care Unit (ICCU) by administering a questionnaire to 248 nurses. The overall picture showed that ICCU nurses expressed a high degree of satisfaction except in relation to salary; only 2 per cent indicated high dissatisfaction. When asked to indicate how they were ranked as professionals by their patients, colleagues and their own families, nurses felt that they were highly ranked. Data related to stress indicated that most stressful factors indicated by nurses were unavailability of physicians, and impaired communication with them. Lack of confidence in nurses’ knowledge and skills was most stressful factor. In each of the above factors all the nurses indicated “stressful” or very “stressful.” The last stressful factor was work left uncompleted. On observing the relationship between job satisfaction and perceived level of stress it was seen that high levels of job satisfaction were correlated with low levels of stress both in the overall scale and in sub scales. However, correlation was not strong enough (r = 0.16), so prediction on relationship of satisfaction and stress is not possible. Satisfaction was found to be in correlation with structure of over on overall scale and sub scales such as coordination, conflicts and communication. Correlation between structure of work and stress is inconsistent. Sub scales of dependence and conflicts were, indeed, correlated with stress. However, unexpected finding was the correlation between good and frequent communication in the unit and high stress. Upon close examination of individual questions it became apparent that high stress was related to close and frequent communication with patient
and their families and with paramedical staff. On the other hand, close and frequent communications with nursing and medical staff were in correlation with low stress. Other factors related to job satisfaction were dependent on a number of professional activities a nurse was involved. It indicated that if a nurse was involved in her work and showed her preference to be involved and to adopt new methods and procedures, read more professional books and journals, she participated in more activities and identified the needs for broader education and was ready to invest more time and energy for professional purposes, she was more satisfied. Further, the factors related to stress were identified pertaining to nurses who studied in Anglo Saxon countries, were working for more hours, read more professional books, whose current status was higher, had gained less professional responsibility during their professional experience, prefer the structure of work which allowed autonomy and involvement in judgment and decision making, identified the need for additional technical preparation perceived a higher level of stress. Hence, it was deduced that nurses were willing to ‘pay the price’ of professionalism, to work under stress and yet be autonomous, take responsibility for work decision, and be highly involved in work thus gaining satisfaction.\(^{49}\)

Rao Pratima (1991) conducted a case study on Hospital Service Administration in Safadarjung Hospital Delhi. Findings indicated that only 30 per cent of nurses were satisfied with job. Among them 8 per cent were highly satisfied. Another 44 were somewhat satisfied and 26 per cent were least satisfied. Satisfaction score was highest for work itself, supervision was at second rank, material reward were at third rank and working organization was at fourth rank. It was further reported that there was less number of staff than required, lack of coordination among supervisors and rest of staff, lack of opportunity for professional growth and little scope for participation in professional activities. There was very little involvement of nursing personnel in administration decisions i.e. only Nursing Superintendent being member of some committees.\(^{50}\)

Seymour and Buscherhof (1991) viewed sources and consequences of satisfaction and dissatisfaction in nursing by getting a questionnaire filled by 252 members of American Nursing Association at University of Colorado. The findings revealed that interest in work and services of others were the main motivating sources (25.7 per cent). Professional and personal development opportunities (25.1 per cent)
ranked second, material rewards ranked third (19.4 per cent) whereas inadequate working conditions and counter productive attitude within employing organisation were most serious sources of dissatisfaction. Further, the study revealed that dissatisfaction with remuneration and benefits ranked second whereas gender discrimination ranked third. Dissatisfaction with nursing colleagues ranked fourth and problem with nursing education ranked fifth as compared to lack of respect and recognition which ranked sixth and family related issues ranked seventh.\textsuperscript{51}

Blegen Mary A (1993) studied job satisfaction and related variables by meta-analysis of 48 studies with a total of 18,048 subjects. Data revealed that job satisfaction was most strongly associated with stress (-0.609) and organisational commitment (0.526). Another five variables were moderately related with job satisfaction i.e. communication of supervisor (0.446), autonomy (0.419), recognition (0.455), routinisation (0.412) and communication with peers (0.358). Variables having small to moderate relationship were fairness (0.295), locus of control (-0.283) and age (0.133). Finally four variables had low correlations i.e. years of experience (0.086), education (-0.070) and professionalism (0.06).\textsuperscript{52}

Said Al Hussein et al (1993) analysed the factors leading to poor quality of nursing care in government health institutions in the central region of Ghana. It was indicated in the study that, professional nurses performed task below level of training and auxiliary nurses performed task above training. Lack of basic equipment and supply and lack of supervision had hindered performances. Other members of health team also hampered performance, as in their absence; nurses were forced to do their work at the expense of their own work. Lack of in-services education also hindered performance. Lack of promotion, conflict among nurses also affected performance. Nurses accepted that client expectations were genuine but were not able to meet these requirements, because of service factor and personal problems.\textsuperscript{53}

Lucas Mary D et al (1993) focused on replication and validation of anticipated turnover model for 685 registered nurses in seven public and private urban hospitals in southwest area, who filled in the questionnaires, and the replicated study included 385 nurses from 2 public and 2 private hospitals in southeastern area. Data revealed that in the replication study Medical Surgical Unit nurses experienced less group cohesion from nurses of other units. In both studies, nurses having less experience and being on a medical surgical unit were predictor of higher level of stress, whereas in
original study diploma nurses were associated with lower stress levels. Medical surgical nurses significantly experienced more job stress than nurses in critical care units. The $r^2$ for of organisational job satisfaction was 0.46 in the replication study and 0.41 in original study. In both studies job satisfaction was affected by group cohesion positively and job stress negatively. In original study, older nurses had greater organisational job satisfaction than younger nurses. This finding was not replicated. More negative impact on organisational job satisfaction occurred through job stress in replicated study, whereas job satisfaction buffed the impact of job stress in original study. In both studies, professional job satisfaction was predicted positively by group cohesion, but negatively by job stress, and working on medical surgical unit. In original study nurses on night shift had higher level of professional job satisfaction. This finding was not replicated. Moreover, group cohesion and both type of job satisfaction inhibits turnover. Anticipated turnover was a good predictive of actual turnover with discriminate analysis yielding 73.2 per cent successful predictions in the replicated study and 76.2 per cent in original study.

Carlisle Caroline et al (1994) compared stress among midwives and nurses by comparing the work environment of 29 midwives and 180 nurses, by using the work environment scale questionnaire. Findings revealed that midwives felt significantly less involved than their nursing colleagues. They perceived less support, less autonomy, greater pressure of work and less clarity in their role. However, no significant difference was reported between midwives and nurses on peer cohesion, control, innovation or physical comfort.

Irvine and Evans (1995) did a meta-analytic study to investigate the relationship among job satisfaction, behavioural intentions and nurses' turnover behaviour. A strong positive relationship was indicated between behavioural intentions and turnover, while strong negative relationship was observed between job satisfaction and behaviour intentions. However, a small negative relationship between job satisfaction and turnover was observed. Of variables related to nursing job satisfaction, were work content and work environment which had a strong relationship with job satisfaction than economic or individual difference variables (age, work experience and organisational tenure), characteristics of job (e.g. routinisation, autonomy and feedback), or characteristics of how the work role is defined (e.g. role conflict and role ambiguity) had moderately strong relationship with job satisfaction.
Characteristics of work environment such as supervisory relations, leadership, stress, advancement opportunity and participation were also moderately related to job.56

Sangar and Samuel (1995) studied the opinions on shortage of nursing manpower of 57 doctors and 57 nurses from two medical and two surgical wards, by administering a semi-structured questionnaire. Findings revealed that most of nurses (88 per cent) and doctor (74 per cent) were of the opinion, that the number of nursing staff in their wards was not sufficient. Reasons of shortage as expressed by most of the nurses were, lack of leave substitute, less accommodation in campus, fewer number of posts, large turnover, too many leaves and increase of beds and departments with no plan for staff increase. While doctors expressed the reason for shortage, as lack of leave substitute, less number of posts, disproportionate placement of nurses and increase of beds and departments with no plan for staff increase. Reasons for taking leave as expressed by doctors and nurses were due to personal problems, health reasons, abortions and confinement, extension of leave and emergency. Large number of turnover was more concerned with nurses (71 per cent), in comparison to doctors (40 per cent). Wilful absenteeism was the least response from nurses (29 per cent) whereas leave for higher studies, was the least according to doctors (18 per cent).57

Padmam Razeena (1995) compared Staff Nurses and nursing students on extroversion, neuroticism and job satisfaction. A sample of 150 Staff Nurses and 150 nursing students was selected from various hospitals and nursing colleges of Thiruvananthapuram district of Kerala. Subjects were administered Moudsley Personality Inventory and Job Satisfaction Inventory. The results revealed that nursing students were found significantly more extroverted than Staff Nurses, but no significant difference between Staff Nurses and nursing students' neurotic was observed. However, Staff Nurses were slightly more in neuroticism than nursing students. It was further reported that Staff Nurses and student nurses who were satisfied in their jobs were seen to be more extroverted than dissatisfied staff and student nurses. The staff and students nurses who were satisfied on their job were seen to be less neurotic than the dissatisfied staff and student nurses.58

Yoder Linda H (1995) investigated staff nurses' career development relationships (CDRs) in relation to the outcome of professionalism, job satisfaction and intent to stay. A sample of 390 army staff nurses completed the questionnaires.
Findings indicated that 61 per cent nurses have experienced a career development relationship (CDR). Characteristics of nurses who stated that they had not experienced CDR were compared with those who stated that they had. No significant differences were found on demographic variables. Army staff nurses took part in the five different types of CDRs i.e. perception (14 per cent), peer-strategizing (8 per cent), sponsoring (5 per cent), mentoring (23 per cent) and coaching (50 per cent). Majority of the nurses reported that CDRs have a substantial impact on their professional life but minimum effect on their personal life. Further, scores on outcome variables of professionalism, job satisfaction and intention to stay did not differ significantly across the five groups of CDRs. But the difference in comparison to CDR group and non-CDR group indicated that professionalism was not related to CDR whereas job satisfaction and intent to stay among nurses experienced CDR were slightly greater than non-CDR group. Age, length of service and years of experience of nurses were correlated with professionalism, job satisfaction and intent to stay. The largest correlations were between age and intent to stay (0.32), years of experience and intent to stay (0.23). ANOVA results indicate that CDR had effect on job satisfaction and intent to stay but it may not matter what type of CDR, nurses had experienced.

Duquette Andre et al (1995) studied psychosocial determinants of burnout in geriatric nursing. The findings revealed that female nurses perceived more work stress, than male nurses. Those living with partners used more active coping than others. Bedside nurses were more burnt out than others. Nurses occupying management positions (Head Nurses and Assistant Head Nurses) not only perceived more work stressors, but also perceived more work support and demonstrated more hardiness. Full time staffs perceived more work stressors, and were more burnt out whereas part time staff used more active coping. Nurses working on day shift perceived more work support and showed more hardiness. Nurses working in nursing homes perceived more work stressors than those working in hospitals. Commitment and control were significant determinants of burnout, whereas challenge did not contribute significantly in predicting the burnout cases. Work stressors contributed significantly to the prediction equation — social, physical and psychosocial environment. The results suggested that most important stressors inducing burnout were frequent conflicts between physicians and nurses as well as heavy workload. The work support variables i.e. support from superiors and peers cohesion (-0.10) were
significant determinant of burn out. It suggests that if geriatric nurses perceive social support and in their work setting either from superior or peers, they would be less likely to burn out. Out of the coping methods avoidance and active cognitive were found to be significant determinants of burnout. Out of socio demographic variables only employment status contributed significantly to burnout. The findings also suggested that full timers were more prone to burnout.60

Misener Terry R et al (1996) assessed the validity of the McClosky/Mueller Satisfaction Scale (MMSS) in West Bank a dissimilar society and culture from United States, where the instrument was developed. The second purpose was to measure correlation between the MMSS total score and a single item measure of job satisfaction. For this purpose, 165 Palestinian nurses employed in 25 acute care hospital of West Bank completed the questionnaire. Results of the study revealed that mean item score ranged from 2.01 to 3.88 with 5 being the highest. The top four satisfiers were amount of responsibility, physician with whom the nurses worked, nursing peers and control over work conditions. Whereas, the least satisfiers were opportunity to write and publish, participation in nursing research, childcare facilities and opportunity for part time work. As per over all job satisfactions core 71 per cent respondents reported satisfied or very satisfied with job. Hence, out of the eight factors of MMSS scale only four factors emerged in said study: Interaction, Extrinsic Rewards, Control over environment and Professional participation. The resulting model was more similar to the original 1974 McCloskey conceptual framework than 1990 eight factors model.61

Ajamieh Abdul Rahman Abu et al (1996) viewed job satisfaction correlation among 330 Palestinian nurses employed in 20 acute care hospitals of West Bank of Palestine. The findings indicated that responsibility ranked highest (3.88) (where 3 is neutral point) in terms of satisfaction followed by relationship with physician (3.84) and nursing peer relationship (3.82). Control over work conditions (3.79) and flexibility in scheduling weekends off (3.63) occupied fourth and fifth place respectively. The least satisfying variables were the opportunity to publish (2.0), opportunity to participate in nursing research (2.05) and childcare facilities (2.12). Significant relationships were found between job satisfaction and demographic characteristics of marital status, distance travelled to work, number of years nurse worked as Registered Nurse and extended family responsibility.62
Douglas Marilyn K et al (1996) investigated the stressors, satisfiers and coping strategies of 59 Mexican Auxiliary Nurses by asking them to complete a questionnaire. Major satisfiers were self-fulfilment (29 per cent), service to patient, family and community (20 per cent) followed by working with a team and feeling a part of health team (18 per cent). In addition to these, working conditions (11 per cent) and interpersonal communication (8 per cent) also contributed to positive work experience. Frequent stressors were interpersonal relations (27 per cent). Augustia (anguish) was second most frequently cited reason for work stress (20 per cent) (Augustia resulted when respondent felt a lack of control over the situation e.g. patient is dying and nothing can be done to help him), third kind of stressors were overload (15 per cent). Work environment particulars contact with communicable diseases was also cited as the fourth stressor (13 per cent). Fifth category of stressors included lack of resources (5 per cent), poor transportation (4 per cent) and lack of time. In order to cope with stressors auxiliaries used problems solving methods (34 per cent), talking with same one about stress (23 per cent), diversions (22 per cent), trying to relax (4 per cent) and other strategies (17 per cent) like relajarse (to loosen, slacken, amuse or entertain oneself to calm down).

Jansen Patrick G.M. et al (1996) described the effects of job characteristics and individual characteristics on job satisfaction and burnout in community nursing in the Netherlands. The results indicated that these nurses were moderately satisfied with their jobs and effects of burnout were average. But there were differences in job satisfaction between two types of nurses. Community nurses were subject to greater pressure in respect of time, variety and nature of their work (doing assessment and diagnosis) was greater and they received less feedback as compared to nurse auxiliaries. In addition to these job characteristics, the nurses and auxiliaries differed on two individual characteristics: Nurses preferred autonomy in their work to a greater extent and auxiliaries receive more social support from their Head Nurses. Data further showed that community nurse auxiliaries were over all better satisfied, as against community nurses. The score on sub scales showed that the difference occurred in different aspects. As compared to Registered Nurses, nurse auxiliaries experience more satisfaction with their work in general and were more satisfied with the clarity of their job description and opportunities for professional growth. Burnout scores showed significant difference between nurses and auxiliaries on all three
dimensions. Nurse auxiliaries were significantly less emotionally exhausted and depersonalised than nurses, and felt more competent personally for the work they were doing.\textsuperscript{64}

Borda and Norman (1997) tested a model of absence and turnover of registered nurses of Malta by a cross sectional, co-relationship between job satisfaction, kinship responsibility, pay, employment opportunity, intent to stay in an employment and absence of male and female nurses. Absence record was taken from hospital records. 171 nurses completed the questionnaire. The result showed that majority of nurses (61 per cent) were satisfied with their job and intended to stay (63 per cent) in their present employment for next 12 months. The areas of greater satisfaction were amount of responsibility, immediate supervisors, salary and recognition from peers. As compared to aspects of greatest dissatisfaction, which included child care facilities, flexibility in scheduling hours of work, weekend offs, opportunity to write and publish, opportunity to participate in nursing research and opportunities for career advancement. As per relationships between variables, were different in male and female nurses whereas, job satisfaction was associated with intent to stay for male nurses and not for female nurses, kinship responsibility and intent to stay were associated with absence for female nurses unlike male nurses. A negative relation with job satisfaction and absence was found in male and female nurses.\textsuperscript{65}

Urden and Roode (1997) studied the time spent by nurses on various direct and indirect patient care activities through work sampling technique of consistent, random, instantaneous observation of work activities of nurses by an independent observer who recorded various activities on data collection form. Results indicated that maximum nursing time of paediatric nurses was spent on direct nursing (42 per cent) followed by ICU nurses (37 per cent) and Medical Surgical Department nurses (32 per cent). On the average Registered Nurses spent 37 per cent of time on direct care, 22 per cent on indirect care, 4 per cent in unit related activities and 14 per cent on personal activities and 23 per cent on documentation.\textsuperscript{66}

Acorn Sonia et al (1997) tested a model on decentralization as a determinant of autonomy, job satisfaction and organisational commitment among nurse managers. Data was collected through mailed questionnaire from 200 first line nurse managers in acute care hospitals with more than 100 beds in British Colombia, Canada. Results
revealed that decentralization produced significant positive direct effects on autonomy, job satisfaction and organisational commitment. Further, autonomy had a significant direct effect on job satisfaction, and job satisfaction in turn had a significant direct effect on organisational commitment. Consequently, autonomy indirectly affected organisational commitment. Job satisfaction is an important predictor of organisational commitment. However, the degree of decentralization in a hospital was the exogenous variable and was a very strong determinant of organisation commitment directly and also shown to influence autonomy and job satisfaction indirectly.67

McNeese-Smith Douna K (1997) viewed the influence of manager behaviour on nurses’ job satisfaction, productivity and commitment. Thirty nurses from large Los Angeles country hospital were interviewed by using nine semi-structured interview schedules. Nurses reported much managerial behaviour that influenced their work experience of nursing in the organisation. These were grouped under four categories - providing recognition, praise and thanks, meeting nurses’ personal needs, using leadership skills and meeting unit needs and supporting the team. However, factors leading to dissatisfaction included no recognition and not providing support, no follow through, criticism in crisis. The researches further reported that manager activities, which helped nurses to be more productive, were providing recognition and/or thanks, creating a positive climate while, lack of productivity was caused by criticising staff. Managerial fact on organisational commitment was described differently, than job satisfaction and productivity. They focused on the managers' leadership behaviour i.e. creating a positive influence, using open communication role model, education focus, supportive. However, lack of organisational commitment was caused by managers’ negative influence i.e. feeling unappreciated or unsupported by the manager.68

Borda and Norman (1997b) reviewed nursing literature to identify the factors influencing turnover and absence of nurses. Review identified intent to stay in current employment as a factor with greatest influence on turnover. Intent to stay was in turn most strongly associated with job satisfaction. The other factors identified by the study were pay, opportunity for alternate employment and kinship responsibility. Further, job satisfaction and kinship responsibility influenced absence and intent to stay. Similarly, absence was identified as an antecedent to turnover. The study
concluded that understanding such relationship should allow identification of management strategies to reduce both turnover and absence.69

Boey Kam Weng (1998) examined the role of coping strategies and family relationship in mitigating the negative effect of work stress on nurses by administering a questionnaire to 1043 nurses from three main public hospitals of Singapore. Results indicated that response of nurses for the level of job satisfaction was generally low. Only one-third nurses were satisfied with their job. Two third of nurses had thought of quitting the profession altogether and 72 per cent of them had to force themselves to work. Whereas, with respect to five aspects of family relationship nurses generally felt satisfied with the support they got from their families. In order to cope up the majority of Singapore nurses were engaged in improvement methods as self-examination, attending seminars or training course and reading books to inspire themselves. Very few would resort to take medical leave or prescribed medicine and less than one per cent would seek professional help in coping with work stress. It was further reported that coping method such as problem orientation, ability enhancement and change of perspective were more frequently observed among stress-resistant groups, whereas in contrast to it, negative emotion focused coping i.e. avoidance was more frequently adopted among distressed nurses. Hence, the stress-resistant nurses, who were satisfied with their job even under high level of work stress, adopted a positive coping method more often than distressed, nurses who felt job dissatisfaction under high level of stress. It was further reported that effect of change of perspective and ability enhancement could be more relevant to coping with high level of work stress but they play, less important role among nurses under low work stress. Similarly, positive effect of family support was more significant for nurses under high level of work stress than those under low level of work stress. Thus, coping strategy and family support could explain all the variance in job satisfaction.70

Chung and Corbett (1998) compared the burnout of nursing staff work with challenging behaviour of client in hospital based bungalows and community units. Twelve staff members from hospital based bungalows and 26 from community units were asked to complete the questionnaire. The results showed that clients in the hospital based bungalows were more severe in challenging behaviour, than those in community unit. Further, staff in hospital-based bungalows was less satisfied with the salaries and enjoyed less contacts with clients. They complained more than the
community unit staff, and felt that their present training was inadequate. They were more emotionally exhausted and experienced more depersonalisation towards clients than community unit staff. The level of personal accomplishment was, however, similar. In two groups’ correlation showed that there was significant association between staff burnout and management issues rather than clients’ behaviour, particularly in the hospital based bungalow group.\textsuperscript{71}

Ghai Sandhya (1998) analysed job satisfaction/dissatisfaction among nurses. Findings illustrated that 37 per cent nurses were satisfied, 18 per cent were dissatisfied and 45 per cent were indifferent, i.e. neither satisfied nor dissatisfied. Major factors about which nurses were dissatisfied were policies governing promotions, rewards for outstanding performance, recognition given to qualification, respect from Class-IV employees, working in night shift and supply of equipment in ward and provision of accommodation. Further, the area that had satisfaction were health facilities provided by institute to nursing personnel and their dependents, crèche facilities, facilities for on the job training, uniform, overall nursing service administration of the ward and their own performance.\textsuperscript{72}

Sarma RK \textit{et al} (1998) conducted work-study of nurses in a general medical ward of super specialty hospital. The activity analysis of different category of nursing personal was conducted. Study revealed that in Assistant Nursing Supervisor out of 48 activities observed, only 7 per cent were spent in direct and indirect patient care; 21 per cent on administrative work; 25 per cent on clerical work; 10 per cent on maintenance and miscellaneous activities, whereas 35 per cent were non productive. Sister Grade-I spent 20 per cent time on activities as direct and indirect patient care; 10 per cent on administrative work; 16 per cent on clerical work; 15 per cent on maintenance and miscellaneous work, and 36 per cent of activities were non productive. Sister Grade-II spend 42 per cent of their activities in patient care (direct and indirect); 5 per cent in administrative work; 22 per cent on maintenance and miscellaneous work; whereas 26 per cent of their activities were non productive. Further, analysis of direct patient care, indicated that out of 114 activities; 10 per cent were for supply of linen and bed making; 5 per cent were on routine hygiene care; 10 per cent for collection, labelling and dispatch of samples; 30 per cent for carrying out technical procedures and 11 per cent for health teaching to patients regarding their condition, procedures, discharge advise and so on. The study showed that nursing
staffs spend lot of time in administrative, supervisory work in the wards, record keeping and clerical non-nursing jobs."

Kangas Sandra et al (1999) explored the relationship among job satisfaction of registered nurses with organisational structure, organisational culture, nursing care delivery models, general background and demographic information. Overall score on nurses' jobs satisfaction scale indicated that nurses in this study were slightly more satisfied with their job than being dissatisfied. However, no significant differences were found for job satisfaction of nurses practicing different nursing care delivery models i.e. team nursing, primary nursing and case management. Similarly, no significant difference was observed in job satisfaction with two different organisational structures i.e. traditional and shared governance, though analysis of variance for job satisfaction differences by case delivery model approached significance (p=0.077). Further, multiple regression of factors that predicted job satisfaction, depicted that perceiving the environment as supportive and working in a critical care unit were significant predictors of nurses job satisfaction scores. These two variables predicted 55 per cent of variance in job satisfaction.

Baba Vishwanath V (1999) examined work related depression among 119 nurses working in major hospitals of the Caribbean. Results indicated that depression showed significant positive correlation with gender, role over load, role conflict, stress, burnout, absenteeism and turnover intentions and significant negative correlation with social support, whereas stress was significantly and positively correlated with role over load, role conflict, burnout and turnover intention and negatively with decision latitude and social support. However, social support was negatively correlated with burnout and absenteeism. Further, turnover intention was positively related to absenteeism, attesting to consistency of withdrawal cooperation among nurses. Decision latitude was negatively correlated with turnover intentions. Other findings included significant positive correlation between gender and absenteeism suggesting that male nurses were more prone to absenteeism than female nurses. Hence, the role over load, role conflict and social support demonstrate significant link to stress. Stress in turn found to be significant positive predictor of burnout and it showed a significant positive link to depression. While depression showed significant positive impact on absenteeism and turnover intention and social support had a significant direct effect on burnout.
Ellefsen B et al (2000) compared the degree of empowerment of degree nurses from two major university hospitals i.e. 590 nurses from Norway and 135 from USA. Results indicated that overall; the nurses in both hospitals had moderate degree of empowerment. The Norwegian nurses had slightly more informal power than USA nurses. Formal power explained 51 per cent of overall empowerment while formal and informal together explained 62 per cent. Of the demographic variables leadership position showed higher scores on power construct for both countries, education made a difference for American nurses, and age for Norwegian nurses.76

Supe Avinash (2000) focused on determining incidence of stress and factors controlling stress in nurses, at different work situations, in a public hospital. Ninety staff nurses (30 each from wards, operation theatre and ICU) were asked to complete a questionnaire. Results revealed that majority of nurses (65.5 per cent) perceived stress. Stress was significantly more in wards and ICU, rather than the operation theatre (p<0.05). Stress was not found to differ significantly, depending on years of service, stay at hostel, mode of travel, time spent in travel every day, medium of study in school and place of school education. Stress was found to be significantly less, in Staff Nurses having less than 50 per cent of marks in 12th standard examinations as compared to others. Work stress was greater perceived as a cause of stress in nurses. Conflict between work and home was a major factor. Stress was found to be more in nurses working in wards and ICU rather than the operation theatre. Career related factors were found to be significantly more in ward nurses as compared to ICU nurses. Stress was more common in a hospital having dominant strategy of coping as positive reappraisal, accepting responsibility and planned problem solving, whereas stress was less common in nurses having dominant strategy of coping as self-control, and distancing from difficult situation. Further, stress was more in nurses in the 31-40 year age group as compared to younger groups. The commonest dominant stressor in this group was conflict at home and workplace. The dominant coping strategy was positive reappraisal. The correlation between age and stress was 0.22 suggesting low positive co-relation. However, stress was not found to be significantly more in nurses having their personality factor contributing to stress (Type-A 25/41) as compared to other (Type-B 34/48). This indicated that the stress was not trait oriented but work related.77
Trinkoff Alison M (2000) examined the substance usage among 3600 working nurses in USA. Findings highlighted that role strains measured through job demands and depressive symptoms were related to substance usage along with other related causes like access to substances and freedom from negative prescriptions.78

Pongruengphant and Tyson (2000) studied occupation stress, job satisfaction and crying as a coping strategy. Two hundred nurses from Thailand filled a self-administered questionnaire. Results revealed that as a coping strategy nurses in Thailand did not cry very frequently but when they cried, it was a symptom of stress. Crying was significantly correlated with the Nurse Stress Index (NSI) and, in particular, was symptomatic of home/work conflicts, dealing with patients, and role confidence. Crying among nurses was not significantly correlated with primary sources of occupational stress or with job satisfaction or related to work load pressure due to insufficient time or resources necessary to complete nursing tasks. Job satisfaction as an outcome variable loosely linked to coping with stress was hypothesized to be negatively related to crying, although negatively correlated total job satisfaction measures were not significantly predicted by how frequently nurses cope with stress by crying. Supporting the stress-buffering hypotheses, nurses with lower intrinsic job satisfaction seemed to benefit from emotional crying whereas dissatisfied nurses who cry infrequently reported the highest trends of stress.79

Kipping CJ (2000) investigated the stress in mental health nursing. Data was obtained via questionnaire from 447 mental health nurses at the end of their training. Open-ended questions were asked about nurses’ experience of stress during student times and what they anticipated, once qualified. Results revealed that eighteen categories emerged from the questions about past stress and thirteen from the questions asked about anticipated stress. Although a number of the categories identified were common to both past and anticipated stress, six categories emerged which were exclusive to the past; these were about student issues i.e. exams/assessment/written work, placement and other student issues; the other stressors were feeling unable to make a difference, personal issues and related to physical environment. Taking together students issues were mentioned by 56 per cent of the respondents. Eleven categories emerged which were common to both the past and anticipated stress questions. These were related to patient care, staff attitudes and behaviour, resources issues (lack of resources and time), aspects of job
(responsibilities, discipline and administrative issues), thoughts/feelings/expectation of self, lack of support/supervision, cultural environment (high work load, low morale and paper work), career issues, employment conditions, poor care and aspects of organisational change. Other sources of stress, which were anticipated, only were change in role to a qualified nurse. These issues were related to new responsibility, accountability, taking charge of a ward, managing other staff, taking responsibility of client care, delegating and being only/most senior nurse on shift. Other areas of concern were, meeting others high expectations/being expected to know every thing, feeling in experienced/lacking knowledge and skill, fear of making mistakes, responsibility in relation to junior staff.

Andersson E et al (2000) described job satisfaction and psychosocial work environment in an in-patient adult psychiatric care. A total of 130 nurses working in a psychiatric hospital in Sweden filled the questionnaire. The result indicated the positive relation between job satisfaction and work environment. A statistical significant relationship was observed between nurses’ degree of education or experience in psychiatric care and psychological strain. It was further reported that working in psychiatric care mean a psychological strain, high work-load and gave nurses an opportunity for competence development. They also experienced a relative good social support at work that could compensate this strain and workload.

Saxena Subodh (2001) investigated role stress amongst 200 nursing students of College of Nursing, Cancer Hospital and Research Institute, Gwalior. They were administered 50 items Organisational Role Stress Scale (ORSS). Data revealed that mean score was highest on role over load stress and lowest on role ambiguity stress. It revealed that respondents were over busy in their day-to-day activities. Role occupants felt that there are too many expectations from the significant roles in role set. Role overload was likely to occur more in absence of mechanism of role integration and in absence of power of role-occupant. Lowest score on role ambiguity stress suggested that role occupant was clearer about scope of the job. It reflected better understanding about work colleagues and responsibilities of the job. Role occupant showed higher mean scores on role stagnation, role expectation conflict, role erosion, role isolation and resource inadequacy stress. Lower mean scores were found on inter role distance, personal inadequacy and self-role distance stresses. It was further reported that mean scores on all dimension of scale and over all score was
greater amongst first year nursing students. Statistically a significant difference was found between both groups on all dimension of scale, except role erosion, personal inadequacy and self-role distance stress.\textsuperscript{82}

Vati and Walia (2001) examined facilities available and used for staff and professional development by hospital nurses of four district hospitals of North India, by administering questionnaire to 172 nurses. Findings revealed that staff and professional development methods including orientation program to newly joined nurses, was negligible. Whereas skill training programs, management training, only few nurses attended conferences and seminars. Other methods like case discussion, supervisory rounds, and 15.5 per cent nurses reported demonstration used by their hospitals as learning methods. All the nursing administrators desired to go for higher education, and other nursing staff expressed to have planned in-services education programs at their district hospitals. They also expressed that there should be regular sessions of teaching for them and planned orientation programs for newly joined staff which should be run by nurse administrators.\textsuperscript{83}

Finn CP (2001) viewed autonomy as an important component for nurses’ job satisfaction by administering questionnaire to 178 registered nurses in large teaching hospital in Australia. Autonomy was the most important job component of Registered Nurses followed by interaction, task requirement and professional status and the least favoured of job component was organisational policies. The actual level of satisfaction with autonomy was 4.6, on a scale of one very dissatisfied and 7 for very satisfied. Seventy per cent of Registered Nurses at the study hospital were more satisfied with the amount of professional autonomy than dissatisfied. Professional status had the highest score, with 93 per cent of nurses as satisfied. Eighty eight per cent nurses were satisfied with interaction, 22 per cent with task requirement and only 17 per cent with organisational policies. Nurses who have been employed at hospitals less than 6 months were more satisfied than other nurses at the hospital. Nurses who were preceptors had significantly less job satisfaction than the other nurses at the hospital. Preceptors are nurse who carries out one to one teaching with a new nurse as an additional duty to patient care.\textsuperscript{84}

Cam Olcay (2001) studied the burnout in nursing academicians in Turkey and variables correlated with it. Total 135 academicians filled the questionnaire. Findings indicated that the scores of sub scales of burnout varied significantly from school to
school. For emotional exhaustion the strongest predictor was found to be the work setting satisfaction followed by job satisfaction, job pressure, marital status and fulfilment of self-expectation. For depersonalisation the strongest predictor appeared to be job pressure followed by communication style in the institution and marital status. For the third component personal accomplishment the predictor in the order of strength was, job satisfaction, academic position and work setting satisfaction. Organisational factors were correlated with burnout rather than individual or personal factor.85

Tzeng Huey-Ming (2002) investigated the influence of nurses' working motivation and job satisfaction on intention to quit. The study was conducted in three hospitals of Southern Taiwan where 648 nurses completed the questionnaire. Results revealed that general job satisfaction, job happiness, satisfaction with salary and promotion, institution, educational background and age of nurses' youngest child proved a significant predictor of nurses' intention to quit.86

Sheu Sheila et al (2002) studied perceived stress and physio-psycho-social status of 561 nursing students at the largest nursing school in Taiwan during their initial period of clinical practice and effect of coping behaviour by administering them Perceived Stress Scale (PSS), Physio-Psycho Social Response Scale (PPSRS) and Coping Behaviour Inventory (CBI). Results indicated that degree of stress perceived by students during the first clinical practicum ranged from 16 to 91. The most common type of stress perceived was lack of professional knowledge and skill, followed by taking care of patients. Stress from assignment and work-load, teachers and nursing staff, environment and peers and daily life was low. The three stressful events most commonly encountered by students, were lack of experience and ability in providing nursing care and in making judgement, unfamiliarity with medical history and terms, and worrying about bad grade. Social behavioural systems were the most common response to stress followed by emotional symptoms and physical symptoms. The most common coping behaviour of nursing students during their initial clinical experience was to stay optimistic followed by transference and problem solving. Avoidance behaviour was the least frequently employed. The five common coping behaviour of students were – to cry, to feel moody, sad and helpless, to keep an optimistic and positive attitude in dealing with everything in life; to have confidence in performing as well as senior school mates; to save time for sleep and
maintain a good health to face stress; and to relax via TV, movies, a shower as physical exercise. It was further seen that avoidance behaviour had a negative main effect on students' health, while optimistic behaviour and problem solving had positive main effects on students' physio-psycho-social status. However, this behaviour had no moderating effect on the relationship between stress and physio-psycho-social status. In addition, transference behaviour was found to have neither positive main effects nor moderating effects on physio-psycho-social status.87

Newman and Maylor (2002) studied National Health System plan for nurses' satisfaction, commitment and retention strategies by face-to-face interviews of 124 nurses from four trust hospitals of London. Findings showed that 57 per cent nurses were loyal to the core to their profession, 12 per cent were serious in their intention to leave and remaining were sensitive to further deterioration in work condition or failure to meet expectation on pay. Four main causes of job dissatisfaction were shortage of staff, poor management, patient and relatives behaviour, poor pay and unpaid overtime.88

Rosenstein AH (2002) studied the Nurse-Physician relationship and its impact on nurse satisfaction, and retention through responses gathered from 1200 employees of 84 hospitals at VHA, West Coast. Results indicated that daily interaction between nurses and physicians strongly influenced nurses' morale. All respondents were very much concerned with the significance of nurse patient relationships and the atmosphere they create. Although all respondents saw direct link between disruptive physician behaviour and nurse satisfaction and retention, the group differed on their belief about responsibility, barriers to progress, and potential solutions. The findings suggested that the quality of nurse-physician relationship must be addressed as facilities seek to improve nurse recruitment and retention.89

Tyson Paul D et al (2002) examined the coping with organisational stress among hospital nurses in Southern Ontario. A sample of 107 nurses was asked to rate their occupational stress, job satisfaction and coping strategies. Findings indicated that organisational stress due to lack of organisational support and involvement was found to be the major source of stress as reported by nurses. In addition to that nurses felt that other source of stress were, fluctuations in work-load, time pressure, changes or reduction in staff, conflicts with management, job security, home and work conflicts. Stress measures were negatively correlated with job satisfaction in particular;
organisational stress was negatively correlated with total job satisfaction but appeared to be less related to intrinsic factors than extrinsic factors. On the positive side hospital nurses reported highest level of intrinsic job satisfaction when they had a chance to do things for other people and make use of their abilities. Data related to coping strategies revealed that avoidance and social support were found to be significantly correlated with stress, but neither of these coping strategies appeared to reduce nurses’ level of organisational stress. However, an interaction between problem solving and job satisfaction was found to be highly significant and added 42 per cent to predicting stress level. Supporting the stress-buffering hypothesis, nurses with lower intrinsic job seemed to benefit from employing problem solving as a coping strategy, whereas dissatisfied nurses who infrequently used problem solving reported a higher level of organisational stress. Paradoxically, intrinsically satisfied nurses who most frequently utilized problem solving had experienced heightened organizational stress.90

Yin and Yang (2002) conducted a meta-analysis study on 129 studies to examine the casual relationship among individual, organisational and environmental factors related to nurses’ intention to continue or leave their jobs in Taiwanese hospitals. A total of 4032 subjects were studied. Results of the study revealed that among individual factors only martial status and educational level correlated with nurses’ turnover. Among organisational factors, pay, opportunity for promotion, job satisfaction, job stress, group cohesion and autonomy were significantly correlated with turnover. There were strong positive relationship among autonomy, group cohesion, promotion opportunity, pay and job satisfaction and negative relationship between stress and all these factors. Among individual and organisational factors marital status and educational level correlated with job satisfaction and educational level correlated with autonomy. In addition there was a relationship between position and stress. The strongest individual and organisational factors, which related to nurses’ turnover, were job satisfaction, autonomy, advancement opportunity, job stress, pay, group cohesion, marital status and educational level. Further, on studying the relationship between turnover and external environmental factors it is indicated that there was a positive relationship between nurses’ employment rate, commodity price index and general employment rate.91
Demir A. et al (2003) viewed the factors influencing burnout level in the professional and private lives of nurses working in the university and state hospitals in a city. It was observed that higher education level; work experience and higher status decreased the burnout, while working at night increased it. In addition, nurses who had problems in relations with other team members and were not satisfied with the work conditions had higher levels of burnout. Having difficulty in childcare and in doing house chores, health problems of the nurse herself or her children, economic hardship and difficulties encountered in transportation were other factors increasing burnout.92

McGrath A (2003) viewed the occupational stress in 171 nurses of Northern Ireland through a self-administered questionnaire. Results of the study indicated that in general, respondents were positive about nursing i.e. 30 per cent finding it very satisfying and 47 per cent satisfying. In contrast 59 per cent had thought of leaving nursing at some point and 64 per cent had thought of leaving their place of work in the past year. Another stress inducing factor highlighted by respondents was that some colleagues caused them more stress. Though majority (67 per cent) felt that communication with colleagues and immediate supervisors was effective, another response by 80 per cent of the respondents was that they were unable to influence decision and they felt powerless to change unsatisfactory situations. Some of them (22 per cent) felt that they were not adequately trained or equipped for the job whereas 47 per cent felt that their job did not always fully utilise their training and experience. Further, most commonly cited stressors causing moderate or high stress levels were found to be experiencing too little time to perform duties to the person’s satisfaction and rationing of scarce service or resources and meeting deadlines imposed by others. Over one third found counteracting, unhelpful views others held of their job, was a cause for stress. The least stressful factors were working with ancillary staff, direct contact with patient and contact with significant others such as relatives. It was further reported that respondents’ perceived working life as a source of more stress substantially than personal or domestic life. Final source of external stress was due to ‘The Troubles’ i.e. an Ulster euphemism, for political violence, affecting their working life. Effect of stressors was also assessed by a number of standardised self-administered questionnaires. Results showed that 27 per cent of respondents were identified having mild psychiatric morbidity. Further, respondents seem to experience
less burnout on depersonalisation scale but on a subscale on the feeling of personal accomplishment nurses experience higher level of burnout. On asking about health and contact with general practitioners only 33 per cent had consulted a doctor between one to three times within the past six months, however, 18 per cent had been hospitalised in the past years. However, absenteeism was not marked i.e. only three days off in six months on the average. Data related to coping with stress reported that respondents tried to alleviate stress by avoiding stressful task and doing other less important, less stressful tasks. Avoidance behaviour is recognized as a coping mechanism for dealing with stress. Sixty seven per cent of respondents felt that their immediate supervisors understood the stressors. However, 52 per cent said that their employers provided no means of helping staff that suffered from work related stress. Of respondents identified source of support, mentioned individual support, a change of group, counselling, staff mailing, a reduced work-load, discussion group, sick leave, early retirement and recreation. Eighty two per cent of the respondents said that primary source of support was immediate work group and other mentioned about employer’s organisation and professional organisation. Respondents views on factors alleviating stress were, gain in financial resources, more support from seniors, further training, change of profession or change of location.93

Lambert Vickie A et al (2004) compared cross culture factors that may contribute to nursing shortage, work place stresses and ways of coping in Japan, Thailand, South Korea and USA (Hawaii) among 1554 hospital based nurses, by administering four self-reported questionnaires. Findings suggested that nurses in all four countries ranked, two workplace stressors i.e. workload and dealing with death/dying the highest of all workplace stressors. The findings also suggested four ways of coping i.e. self control, seeking social support, planned problem solving and positive reappraisal. These coping strategies were ranked highest among all the coping modalities. For physical and mental health, across groups, the nurses had comparable scores for physical and mental health with the exception of Thai nurses, as mental health score of Thai nurses was much lower than the mental health score of nurses from other three countries. In comparing physical health, across all groups, it was interesting to note that nurses from different countries identified similar predictors. Nurses from Japan and USA (Hawaii) identified workload as a negative predictor of physical health. For the nurses from Japan and Thailand, the number of people
residing in the household was a negative predictor. South Korean and the USA (Hawaii) nurses identified the likelihood to leave the current position as a negative predictor of physical health. Further, like the predictors of physical health, there were a number of predictors of mental health that were cross-culturally similar. Hospital nurses from all the countries identified position as a negative predictor of mental health. The lack of support and coping modality escape avoidance, and were found to be a negative predictor of mental health among nurses from Japan, Thailand and USA (Hawaii). While nurses from these countries may have differing roles, but they demonstrate similar factors that predict the status of their mental health.\textsuperscript{94}

Verplanken Bas (2004) viewed the relationship between job satisfaction and value congruence within four organizational areas among nurses at surgery wards. The results showed that organisational values do play an important role in employee’s job satisfaction. This was in particular the case for values that relate to human relation. These values concern issues such as empowerment, participation, open discussion, sensitivity for employees’ ideas, loyalty, and trust. It was further suggested that those who adhered to human relation values and perceived these values to prevail at their ward held positive attitudes toward the ward and showed high level of job satisfaction in general. The social climate was measured as the strength of the habit to chat with colleagues. The strength of this habit appeared associated with the amount of experienced time pressure; such that when nurses experienced that they had little time to do their duties they had lesser chatting habits. Further attitude towards the ward was the most direct predictor of job satisfaction. Ward attitude was significantly correlated with chatting habits, human relation value congruence and rational goal value congruence but not with time pressure, open system value congruence and internal process value congruence, and internal process value congruence. Time pressure reduced the strength of chatting habits, and thus indirectly had a negative effect on ward attitude and job satisfaction. Hence value congruence has both a direct effect on job satisfaction and indirect effect via ward attitude.\textsuperscript{95}

Choi Jeungok \textit{et al} (2004) examined the perceived nursing work environment of 2324 critical care nurses form 68 hospitals of United States. The highest mean subscale score was $3.13\pm0.5$ for institutional support for clinical competence subscale suggesting that ICU nurses strongly agree that institutional support was present in their clinical practice. The lowest mean score was $2.59\pm0.56$ for support for
professional practice subscale. There was no difference in perception of nursing management staffing and resource adequacy and nurse-physician collaboration as per type of hospitals. But the mean score of subscale on professional practice, nursing process institutional support and nursing compliance were significantly higher in magnet hospitals than non-magnet hospitals. The over all mean score of magnet hospital was also significantly higher than non-magnet hospitals. Further, between hospitals variation was greater than within the hospital variations. (Hospitals successful in attracting or retaining professional nursing staff were termed as magnet hospitals).  

Lambert Vickie A et al (2004b) explored the work place stressors, way of coping and demographic characteristics as predictors of physical and mental health of Japanese hospital nurses. Total 310 nurses completed the questionnaire. Findings illustrated a positive correlation between the likelihood to leave the current nursing position and work place stressors such as work-load, conflict with physicians and other nurses, lack of support, inadequate preparation and uncertainty about treatment and mental health. Accepting responsibility and escape avoidance were the two coping mechanism positively correlated with likelihood of leaving current nursing position. The negative correlations were found among age and years worked as a nurse and the work place stressors such as work-load, death/dying, inadequate preparation and uncertainty about treatment. Other negatively correlated factors were number of family members in house hold with work place stressors. Coping mechanism accepting responsibility is also age related. Negative correlation between age and years worked as nurse and coping mechanism such as seeking social support, accepting responsibility and escape avoidance was also observed. Whereas positive correlation found in age and years worked as a nurse and coping mechanism distancing a problem solving. Most interesting finding was positive correlations found among work place stressors i.e. any one of work place stressor increased so did all of the other stressor increased. All of work place stressors and each of coping mechanism were found positive correlated except few mentioned earlier. All the coping mechanisms were positively correlated, indicating that as any one of the mechanisms was used so were all the other mechanisms. Stressful environment, affected the physical as well as mental health of Japanese nurses.

48
Tzeng Huey-Ming (2004) investigated nurses' self-assessment of their own competencies, job demands and job performance in Taiwan. A total of 304 nurses completed the questionnaire. Findings illustrate that competence related to basic level patient care skills, were the most demanded competency for performing nurses' job and also were most highly rated on self-assessment. Further, nurses' self-assessment of intermediate patient care skill, the difference between self-assessment and job demands for basic patient care skills and nurses' overall satisfaction with their own nursing competencies were three significant predictors of overall satisfaction with nurses' own job performance. Furthermore, self-assessment of basic level patient care skill, advanced level patient care and supervisory skill were significant predictors of nurses' overall satisfaction with their own job performance. Age, education and professional experience were found to be statistically significant predictors of self-assessment of basic level patient care skill. Education and professional experience contributed to level of self-assessment of intermediate level patients care skills and fundamental management skills. Both education and professional experience were statistically significant predictors of self-assessment of advanced type patient care skills and supervisory skills.98

Seo Youngjoon et al (2004) examined the determinants of job satisfaction among hospital nurses of Korea by administering questionnaire to 353 nurses from two general hospitals. Findings indicated that first four of twelve structural variables i.e. workload, supervisory support, routinisation and pay were found to have significant net effects on satisfaction. Further, two psychological variables i.e. positive affectivity and negative affectivity were the second major significant determinant of job satisfaction. Regarding environmental variables, job opportunity was found to have a significant net effect on job satisfaction ranking sixth in importance. Job opportunity outside the organisation had negative impact on job satisfaction. Furthermore, eight of the fifteen variables had no significant effect on job satisfaction i.e. autonomy, co-worker support, role conflict, distribute justice and job growth.99

**Patient Satisfaction**

Sellick Kenneth J. et al (1983) evaluated the effect of primary nursing on patient satisfaction. Primary nursing is an organisation system of care, which emphasizes the delivery of comprehensive, individualized, and continuous nursing
care through the nurse with the authority and autonomy to plan and implement such care. Study was conducted in a large acute medical and surgical hospital in Melbourne. Two general wards were selected. Twenty-eight patients with minimal length of stay of 4 days had completed patient satisfaction questionnaire. Results indicated that patients nursed under a system of primary nursing reported greater satisfaction with care they received than nursed under a traditional system. Statistically significant differences between two groups in favour of primary nursing care were evident on six of 11 items, which examined patients’ perception of care. Detailed examination of items which were significantly different indicated that nurses on the primary nursing unit were perceived to have greater understanding of patients; showed more concern and communicated more with the patients’ family; were more likely to give information to patient regarding his/her illness or tended to contribute more to a positive experience of hospitalization and gave greater consideration to discharge planning.100

Ventura Marlene R et al (1981) evaluated the effectiveness of primary care nursing by using Riser Patient Satisfaction Scale (RPSS). Forty-six patients from two units completed the questionnaire. A great majority of patients showed high level of satisfaction but the mean difference on the patient satisfaction score between units where primary nursing was instituted and the control units showed no significant difference on total score or score of subscale i.e. technical professional, interpersonal education and interpersonal trusting.101

Moores Brian (1983) conducted a time study to ascertain whether patients in the different categories received significantly different quantities of nursing care at Johns Hopkins Hospital. Findings revealed that patient categories as ‘Intensive Care’ received five times as much nursing care as the self-care patient needed. The remaining group labelled as partial care, received twice as much base line group. So it was in ratio of 1:2:5 in self-care, partial depending and intensive care patients. This dependency ratio will help in nursing manpower planning in the hospitals.102

Erler Cheryl (1989) investigated the patient satisfaction with nursing care given during twelve-hour shift versus traditional eight-hour shifts. Study results indicated that patients’ satisfaction with nursing care during a twelve-hour shift did not differ from satisfaction with nursing care during traditional eight-hour shift. This can be considered as determining factors in deciding to adopt flexible scheduling.
Findings of the study also indicated no significant relationship of the study variables to any of the demographic variables.\textsuperscript{103}

Rao Pratima (1991) conducted a case study on Hospital Service Administration: a case study of Safadarjung Hospital Delhi. It was reported in the study that there was shortage of nursing staff. Hence, due to shortage overworked nurses were not able to provide quality patient. Except providing injection and medication and assisting doctors no other services are provided to patients. Attendants do the actual task of nursing. Further patients in every ward were complaining of lack equipments and stinking toilets.\textsuperscript{104}

Zahr Lina Kurdahi \textit{et al} (1991) studied patient satisfaction with nursing care in Alexandria, Egypt using La Monica Oberst patient satisfaction scale. A total of 35 medical and 35 surgical patients filled the questionnaire. The mean total score of respondents was $256.36 \pm 42.34$ (maximum possible of 287), which showed that patient satisfaction was high. There was no significant difference between patients satisfaction score on medical and surgical unit. In general, most clients indicated that they were satisfied with their nursing care. Out of 41 questions 30 (75 per cent) were answered in a positive manner. Patients’ in 40 to 50 years age group were significantly more satisfied with the nursing care they received than older or younger clients. Male patients and patients with primary education were more satisfied with nursing care than others.\textsuperscript{105}

Essen and Sjoden (2003) investigated patients’ (n=81) and nursing staffs’ (n=105) perception of most and least important caring behaviours by using a CARE-Q instrument. There were significant differences between the two groups on five of the six sub scales. Patient assigned significantly higher rank than nursing staff to items belonging to the “explains and facilitates”, “anticipates” and “monitors and follows through” subscales, whereas, the nursing staff ranked items belonging to the “comforts” and “trusting relationship” subscale significantly higher than patients. There were significant differences between patients and staff for 29 out of the 50 individual CARE-Q items. The items that patients ranked significantly were from following subscales: ‘monitors and follow through’, ‘trusting relationship’, ‘comforts’, ‘explains and facilities’, ‘anticipates’ and ‘accessible’. Staff gave significantly higher ranking than patients on items from ‘comforts’, ‘accessible’, ‘trusting relationship’ and ‘monitors and follows through’. Hence, patients perceived
technical/instrumental items to be more important than staff while staff value expressive/effective item higher than patients. Comparison of top ten items revealed similarities as well as differences between patient and staff perceptions. The following five items were ranked among the top ten by both patients and staff i.e. 'know when to call doctor', 'put the patient first no matter what else happens', 'tell the patient in an understanding language what is important to know about the illness and the treatment'; 'listen to the patient' and 'is perceptive to the patient’s needs'. Among the patient’s 10 highest ranked items that the patients but not the staff have given high ranks, concern specific actions with focus on the treatment of the patient’s illness whereas items that staff, but not the patient have placed among 10 highest rank concern communication with satisfying emotional needs among the patients. Further, analysis of ten least important items revealed seven items common to both groups, which indicated that patient and staff are in agreement to make patient feel cared for. Further, it did not seem important that staff enact certain social and courtesy manners that were more associated with other relationships. Patients showed no significant difference on the basis of sex, age groups, and marital status. But significant differences were observed on the basis of occupation, which the subscale explains and facilitates i.e. higher values were given by those who were working than those on sick leave and old age pensioners. Similarly, subscale anticipates got a higher value by those who were on sick leave, than by old age pensioners and for staff no significant difference on the basis of age groups, marital status but years of experience showed significant different between the group on subscale ‘comforts’ i.e. working experience of less than 5 years and 5-15 years gave a higher values to this subscale than those who had been working more than 15 years.

Bruster Stephen et al (1994) interviewed 150 randomly chosen patients, for patients’ satisfaction from 36 NHS hospitals in England who had been discharged, recently. Results showed that all the questions except those related to food items showed 89 per cent satisfaction rating. But some problems were also highlighted in the survey, particularly regarding communication, pain management, discharge planning and untold warning signs. The hospital failed to reach the standard of patient charter, for example in explaining the treatment proposed, giving patient the opinion of not taking part in students’ training, not caring about privacy of patients.
Carveth Judith Ann (1995) examined the perceived patient deviance and its relationship to avoidance behaviour of nurses. Avoidance included a reduction in the number and duration of nursing contacts with patient, a reduction in the number of nurse-initiated contacts, the use of physical restraints and failure to meet individualized needs of patients. Fifty-two registered nurses on adult health units classified known patients into three study groups, ideal patient, neutral patient and difficult (deviant) patient. Analysis of variance showed no significant differences for mean number, duration, and initiators of nurse-patient contacts. Significant differences were found in the psychosocial individual in the use of physical restrain for three study groups. Agreement of nurses in their classification of patients occurred in 74.63 per cent of cases.108

McNamee Suzanne (1995) conducted a patient satisfaction survey on 65 patients of the cardio thoracic ward. Results indicated that 66 per cent subjects found that preadmission clinic was helpful, as it dispelled some of the fear of the unknown. Ninety three per cent of patients said that they were very satisfied or satisfied with the nursing staff’s attention to their pain relief, patients’ concerns and problems during their stay. Two areas particularly of nursing care required improvement i.e. patient education on warfarin therapy (therapy used for cancer treatment) and promotion of patient/family attendance at the ward based discharge education session. A frequent complaint from patients was the unacceptable level of noise in the ward.109

Williams Rhea P (1998) studied nurse leaders’ perceptions of quality nursing, by interviewing 27 nurse leaders. Four main categories were identified as components of quality nursing, making a difference in patients' lives i.e. meeting patients' needed to accomplish expected outcomes, providing individual patient - oriented care, delivering care with clinical competence and expertise and equipping patients with knowledge. Further, identifying measurement criteria for quality nursing suggested were patient satisfaction, patient outcome and patient education. However, five categories of barriers to quality nursing care were also identified i.e. lack of professionalism, limited resources, rapid change, institutional tenure and organisational culture. Despite these barriers some facilitators to quality nursing were also identified i.e. higher education, nursing leaders to act as role models and management support. Suggestions made by nurse leaders, were regarding professional skills i.e. critical thinking, clinical decisions making essential to track professional

53
nurses; preparing for emerging role in nursing - i.e. tracking community based care to 
nurses; collaboration among academic faculty, academic director, nurse executives 
and nursing service educators.110

Lynn and McMillen (1999) compared 448 patients' and 350 nurses' ranking, 
in the importance of items reflective of good care in seven hospitals in the South-
Eastern United States. Results indicated that patient ranked professionalism higher. 
They valued nurses who were dedicated, efficient professional in their conduct and 
perceived professional care as quality care. Whereas, nurses ranked professionalism 
lower. Further, patient ranked aspects of care related to physical environment and 
psychological aspects of care higher than nurses. Nurses ranked aspects of care related 
to intrinsic characteristics of nursing i.e. empathy, trust, competence and things they 
do for patients i.e. examination and explanation higher than patients suggesting nurses 
over estimated the importance of these aspects.111

Dingman SK et al (1999) compared patients' satisfaction score six-month pre-
intervention and six month post-intervention. The intervention was a caring protocol 
which included self introduction and role explaining, calling patient by name, and 
sitting at patients' bed side for five minutes per shift to plan and review patient care, 
use a handshake or a touch of arm and use the mission, vision and value statement in 
planning care. There was a significant increase in patient satisfaction scores, related to 
nurses' anticipation of needs and the responsiveness of nurses to requests; and aspects 
of care that were designated as areas for improvement. Pre-intervention became major 
strengths post-intervention. However, authors noted that sustained efforts were needed 
to maintain the awareness and integration of the caring behaviour with care. One of 
the most powerful and simple behaviour was the nurse sitting at the bedside and 
taking five minutes of her time to be with patient anticipating patients' needs and 
responding without being asked. This gave patients a powerful proactive message that 
the nurse really cared and valued there input into the day's or night's activities.112

Kangas Sandra et al (1999) studied the organisational factors and patient 
satisfaction with nursing care from three hospitals representing three different nursing 
care delivery models, including team nursing, case management and primary nursing. 
A total of 102 patients were interviewed. Findings indicated that overall patients were 
satisfied with nursing care. Only nursing care delivery model and length of time in the 
unit (inverse correlation) were significant in predicting patient satisfaction with
nursing care. Patients receiving nursing care in primary care delivery model expressed more satisfaction. The longer the patients had been in the unit, the less satisfied they were. The subscale score for education indicated that patients were not satisfied with the education they received from the nursing staff.\textsuperscript{113}

Begat and Severinsson (2001) investigated nurses reflections and interpretations regarding provisional of care, through interviewing 46 nurses who were asked to narrate an episode of providing good care and uncaring. Findings illustrated that nurses reflected episodes where they had provided care that was described as both interpersonal and task oriented aspects. The sub aspects were identified as nurse patient relationship, their ability to understand patient's ability, suffering and taking responsibility. The nurse patient relationship included integration of authority and knowledge of how to act in providing care. Understanding the patients' suffering included reflecting as well as ethical critical thinking of nursing care provided. Finally, taking responsibility for being in relationship between nurses and patient depended upon the nurse's ability to reflect the purpose of providing quality care. Reflective discussions in clinical supervision sessions about possible interpretation of care provided may increase a nurse's knowledge of nursing practices.\textsuperscript{114}

Tengilimoglu D \textit{et al} (2001) measured the patient satisfaction by administering a questionnaire verbally to 420 adults discharged from a major hospital of Turkey. Results demonstrated that as reported by patients, 85 per cent of patients were satisfied with the services provided by nurses. The patients who were graduates were less satisfied than patients with lower level of education. More than half of respondents felt that food services, communication system of hospital, room comfort and equipment availability were poor or insufficient or both and another 48 per cent reported that general cleaning services in hospital were poor.\textsuperscript{115}

Hopkinson and Hallett (2001) explored the perceptions of 12 patients attending a day care unit to find out what was important to these people by interviewing them using phenomenological methodology. Phenomenology was an umbrella term for a variety of different ways of exploring human relations. All 12 patients interviewed considered the service satisfactory and considered it to be more, than any one could or should expect. The phenomena that they considered important in helping them live with a terminal illness were describe as feeling comfortable,
feeling less isolated and feeling good. In addition, the participant found to be living with cancer in two different ways. All the patients (12) knew that they had cancer and might be terminally ill. Yet some seemed to 'tolerate' their life with cancer, whereas other saw it as requiring 'adaptation'. The day care service was supporting both these styles of managing life with cancer. The interpretation of findings suggested that the reason patients expressed such satisfaction with the service offered was because the care was humanistic. It responded to individual opinions, feelings and understanding of health and well being, by giving people time and responding to their individual concern. In this way, it was flexible enough to support people in managing their illness by using their own preferred style.\textsuperscript{116}

Kreulen Grace J \textit{et al} (2002) did a longitudinal study to investigate the substitutability of retrospective pre-test rating for actual pretext rating of indexing charge in patient satisfaction with health status. Total 251 women receiving medical treatment for breast cancer enrolled in self-help intervention project. Results showed a moderate level of agreement between prospective and retrospective approaches for measurement of health status satisfaction. Although recall score showed slightly lower sample means than the pre-tests, but these differences were not large enough to be statistically significant indicating little evidence of response shift. Hence, retrospection can be used as alternative method for assessing pre-test status when prospective pre-test measurement is not possible.\textsuperscript{117}

Tzeng Huey- Ming \textit{et al} (2002) conducted an exploratory study to investigate relationship among staff nurses’ assessment of organisation culture and job satisfaction and patient satisfaction with nursing care. The results indicated that nurses’ variables, strength of culture and job satisfaction had cause-effect relationship with a path coefficient of 0.297 i.e. strength of culture in general, in patient satisfaction with nursing care. The path coefficient for indirect effects provides evidence that the identified organizational process variables i.e. staff nurses’ strength of culture did contribute to the level of the identified clinical outcome indicator i.e. general in patient satisfaction with nursing care through the organisational process variables i.e. staff nurses job satisfaction and the clinical process variables i.e. inpatient satisfaction with home care. These indirect effects ranged from 0.30 (from strength of culture of general in patient satisfaction with home care) to 0.46 (strength of culture to in patient satisfaction with home care), which were moderate to low.
These findings suggested that the strength of organisational culture did have observable indirect effect on general, in patient satisfaction. Strategies to modify organisational culture should contribute to the level of general, in patient satisfaction indirectly through organisational or clinical factors.\textsuperscript{118}

Niakas D et al (2004) investigated the patients' satisfaction for the service provided by three public hospitals of Greece through a self-administered questionnaire from 1295 adult patients. The mean value of satisfaction for medical and nursing services was 86.4 (maximum being 100). Hence, participants demonstrated high satisfaction rate for hospital services. Male patients, patient over 45 years of age and patient with lower education level showed higher level of satisfaction than their counterparts.\textsuperscript{119}

Larrabee June H et al (2004) investigated the influence of registered nurse job satisfaction, context of care, structure of care, patient perceived nurse caring, and patient characteristics on patient satisfaction with inpatient hospital nursing care in an academic medical centre in North West Virginia on 362 patients and 90 registered nurses. Findings illustrated that mean scores for patient satisfaction, patient perceived nurse caring and quality of life indicated high value for each i.e. mean mental health status (50.2) which was equivalent to US norms to (50.5) for the same mean age group, but mean physical status (36.1) was considerably lower than US norm (49.7) for two same age group. Of the variables measures from the nurses' perception, mean scores indicated high nurses' job satisfaction, nurse manage leadership style, and nurse/physician collaboration. Variables significantly and positively correlated with patient satisfaction and were in descending order of magnitude of the relationship; like patient-perceived nurse caring, patient age, quality of life and nurse/physician collaboration whereas, variables not related to patient satisfaction were number of days hospitalized, mental health status, unit turbulence, per cent of budgeted nurses full time equivalent that were filled. Ratio of patient nurses matched to patient days of hospitalization, ratio of nurses to all nursing staff, aggregated nurses' job satisfaction and nurse manager leadership style. None of the three category variables i.e. work status; income and gender were identified as candidate predictors of patient satisfaction. Neither patient satisfaction nor patient perceived nurse caring varied by reading level or method of obtaining data (self administration Vs interview).\textsuperscript{120}
Song Mi - Kyung (2004) reviewed affective outcomes of end-of-life discussion on patient and characteristics of end-of-life discussion by reviewing literature. Retrieved articles suggested that end-of-life discussions contributed to the increase of patient satisfaction and perceived benefit and satisfaction with communication. No evidence of negative effective outcome of end-of-life discussion with patients' was found.\(^{121}\)

Benko Laura B (2004) reported the third annual state-wide survey that graded 200 hospitals on eight quality measures based on experiences of 36,000 patients who were admitted for at least one night in March and June. Findings revealed that, state's hospitals earned high marks for providing physical comfort, coordinating care and respecting patients' personal preferences but they fell short in providing support, involving families and friends and helping patients' transition home. For safe medical practices 43 hospitals scored above average and 44 below average and rest received an average rating. Overall 24 per cent of hospitals scored above average, 51 per cent average and another 25 per cent below average. This was a slight decline than the previous year.\(^{122}\)

Matiti and Trorey (2004) explored patient's perception of their dignity in the hospital setting through a large number of semi-structured interviews. The findings indicated that dignity was difficult to define, multidimensional, subjective, relative and evaluative. But it could be described in terms of physical, psychological and social factor, such as signs of embarrassment, happiness, contentment, confidence and how one interacted and behaved with other people. All these characteristics demonstrated that dignity was a complex phenomenon and it was further important to know how patient adjust in relation to their dignity in hospital environment. The main factors which influenced patient's perceptual adjustment were the degree and type of illness, whether the patients were given information or not, their acceptance of the situation and had they had any previous hospital experience. Maladjustment appeared to be related to a lack of information about what was expected in hospital or due to nurse patient interaction. Eleven categories of how a patient described dignity were identified i.e. privacy, need for information, patients' choice, involvement in their case, independence, forms of address, decency, control, respect and nurse patient communication. Through these attributes patient's dignity is maintained. If one or more categories were not maintained, the patient felt undermined. In each category
there was an element of choice and if a patient felt in control he or she felt dignified. Patient may have some or all of the categories mentioned, depending on his or her cultural background and nurses were required to match patient expectation within each category with their nursing activities.123

So and Chan (2004) compared the critical units of the major hospitals in Hong Kong to assess the perception of stressors by patients and nurses. Fifty patients and 92 nurses completed the questionnaires. Findings illustrate that nurses and patients score were in the range of 55-164 (mean 120.88±2.07) and 17-93 (mean 42.22±17.09) respectively showing wide disparity between the two group i.e. nurses rating in the level of stressors in critical care units was significantly higher than patients’. Referring to the most frequently chosen response for each group, the result indicated that the majority of patients rated items as ‘not stressful’ or ‘mildly stressful’ whilst the nurses scored them as ‘moderately stressful’ and ‘very stressful’, which showed that nurses might have sensitized to the suffering of patient as a result of constant psychological passive in their work environment. Both groups considered the stressor ‘being tied down by tubes’ major stressor. Whereas, stressors ‘being not in control of yourself’, ‘not being able to sleep’, ‘being thirsty’ were perceived as within the six top stressors by patients but were only ranked 9th, 11th and 40th respectively by the nurses. Nurses’ top six perceived stressors were related to physical discomfort and environmental effects.124

Merkouris Anastasios et al (2004) evaluated both qualitative and quantitative approach of the patient satisfaction with nursing care, by interviewing 200 in-patients from two large Greek metropolitan hospitals. Findings revealed that as per quantitative data on the average, satisfaction ratings were moderate. Highest ratings were assigned to the technical aspects of care and to nurses’ response to patients’ demands whilst information delivery items were associated with the lowest rating. Specifically participants were more satisfied with skilfulness punctuality, continuity of care and less satisfied with patient education and orientation they received on admission. The interpersonal aspect of care and the availability of staff as well as the appropriateness of facilities were associated, on the average, with a moderate rating. In regard to specific items, participants rated respect and courtesy items higher than the items regarding concern/communication with staff and cleanliness of rooms and low satisfaction with cleanliness of toilets, noise levels and variety and temperature of
meal. As per qualitative analysis of participants’ comments indicated, nurses were perceived as weak against organisational limitations. The patient commented on nurses as, responsive to patient’s needs, humane and well-mannered but with exceptions, knowledgeable, expert technicians. The patients expressed the need for more nursing time spent on direct patient care. Further, the patients’ expression hinted at non-professional outlook of nurses, and closeness to nurses, but in the mean time they appreciated their closeness to patients and their family members. Hence, qualitative approaches provided objective and quantifiable indices, for evaluating care, which is necessary for comparison and monitoring and qualitative approach. The qualitative approach also unveiled the obvious and converts aspect of patient satisfaction as well as probable antecedents and causes.\textsuperscript{125}

\textbf{Inferences drawn from review of literature}

Literature related to job satisfaction revealed that in different studies nurses were satisfied or highly satisfied with job range from 37 per cent to 77 per cent. The factors relating to job satisfaction and dissatisfaction highlighted by these were autonomy; responsibility, work motivation etc. were related with job satisfaction while lack of sufficient promotional avenues, inadequate working conditions etc. were related with dissatisfaction. Relationship of job satisfaction/dissatisfaction was examined with socio-demographic profile, stress, team nursing/primary nursing and many other variables.

As per the literature surveyed it is evident that nursing is a stress prone occupation and various causes of stress were investigated in different studies e.g. new responsibility, conflicts with team member, caring very sick/dying patients etc. Relationship of socio- demographic profile of nurses, job satisfaction, area of work etc. was assessed in various studies. It was found that stress might lead to burnout i.e. emotional exhaustion, depersonalization and personal accomplishment. Relationship of burnout with other variables was also studied in the reviewed literature. Various methods of coping with stress were assessed in many studies e.g. family and social support, problem solving techniques, sense of professionalism, attending seminars or trainings, reading books etc. Some of the negative coping mechanism e.g. avoidance was also discussed.

Nurses’ turnover was discussed as a major problem in some of hospitals in the literature, as approximately 35-40 nurses leave the hospitals each year. Various
reasons of turnover were highlighted in many studies, such as staff dissatisfaction, employer dissatisfaction, family reasons, leaving for higher education etc. Some of the hospitals known as 'magnet' hospitals could attract and retain nurses by providing many rewards were the main topic of discussion in some of the studies. Some of these rewards were opportunity for higher education, recognition of work, fringe benefits, paid vacation etc.

Job performance was another area of discussion in many studies reviewed in literature. Many time-studies have highlighted nursing time spent on various activities of all levels related to direct patient care, administrative responsibility, clerical, equipment and supply management etc. It was further discussed in literature that job performance was related to job demand. The activities, which were demanded by hospital strictly, were performed regularly as compared to other activities. Some of other problems related to nursing services like shortage of manpower, problems of student nurses were also discussed.

Patient satisfaction was considered as an evaluation tool for nursing care in many of the studies. In most of the studies patients have shown moderate to high level of satisfaction. The satisfying factors were skill, attitude and professionalism of nurses, patient nurse relationship, coordination among team members etc. In the meantime certain aspects with which patients were not satisfied were also highlighted in the literature these being education during discharge, communication system of hospital, food, cleanliness of hospital etc. Patients value nurses, who were dedicated, efficient and professional in their conduct. Further, on the comparison of what nurses and patient think important for patient care and what are the stressors for patient were also examined in a few of the studies. Many suggestions were given for improving nursing care to satisfy the patients have also been discussed in literature.

Scope of the study

The present study makes a comparison of different aspects of nursing services in select teaching hospitals. The select hospitals were PGIMER, Chandigarh – an autonomous body, CMC Ludhiana – a private hospital and PGIMS Rohtak – a State Government hospital. The different aspects of nursing services compared were i) organisation structure of nursing department; ii) operational objectives; iii) job description of nursing personnel at various levels; iv) job satisfaction of nursing
personnel; v) stress among nurses; vi) patient satisfaction with nursing care. The time period of present study was from May 2000 to 2005.

**Objectives of the Study**

Following were the objectives of the present study:

1. To study the organisation structure of nursing services in select hospitals (Autonomous, Private and State Government) in consonance with Indian Nursing Council recommendations.
2. To identify operational objectives of organisation and administration of nursing services in select hospitals.
3. To study and compare job description of nursing personnel in select hospitals.
4. To evaluate and compare the level of job satisfaction and stress among nursing personnel in select hospitals.
5. To assess and compare the level of satisfaction of patient with nursing services in select hospitals.
6. To suggest remedial interventions to improve the nursing services.

**Hypotheses**

The above objectives were tested through the following hypotheses. The broad hypotheses of present study were to analyse the nursing services in different types of organisation structure viz. autonomous, private and state government hospital. Following are the detailed hypotheses, which were tested during the course of study keeping in view the type of organisation.

1. The nursing services in the hospitals conform to the Indian Nursing Council recommendations.
2. Objectives for nursing service department are not fully achieved.
   a) The nursing services in the autonomous hospitals are better placed than the government owned hospitals.
   b) The nursing services in the private hospitals are more professionally managed in comparison to autonomous/government owned hospitals.
3. Level of job satisfaction of nursing personnel is low.
   a) Higher the specialisation among nursing staff higher is the job satisfaction.
   b) Longer the length of service lower is the job satisfaction.
4. Level of stress among nurses is high
   a) Higher is the level of job satisfaction lower is the level of stress.
   b) Longer the length of service lower is the level of job stress.

5. Level of patient satisfaction with nursing services is low.
   a) Patient satisfaction is higher in the privately managed hospitals as compared to the autonomous/government owned hospitals.
   b) Higher the experience of the nursing personnel lower is the patient satisfaction.

Methodology

The Union Territory (UT) Chandigarh is surrounded by three states namely Punjab, Haryana and Himachal Pradesh. The teaching hospitals of Chandigarh and its surrounding states were selected for study. Chandigarh (UT) and States of Punjab, Haryana and Himachal Pradesh have three types of teaching hospitals i.e. State Government Hospitals, Private Hospitals and Autonomous bodies. There are total 7 State Government Hospitals (3 in Punjab, 2 in Himachal, 1 in Haryana and 1 in Chandigarh), 2 Private Hospitals (Punjab) and one autonomous body (Chandigarh) one hospital from each category was selected by lottery method i.e.

- Autonomous body - PGIMER Chandigarh
- Private Hospital - CMC Ludhiana
- State Government Hospital - PGIMS Rohtak

Selection of Nursing Personnel

All available nursing personnel at select hospitals were taken for study, which included:
- Chief Nursing Officer
- Nursing Superintendent
- Deputy Nursing Superintendents/Matron
- Assistant Nursing Superintendent/Assistant Matron
- Nursing Supervisors
- Nursing Sister/Sister Grade-I
- Staff Nurse/Sister Grade-II

All the available nursing personnel were categorized under three categories i.e.

i) Nursing Administrators which included
- Chief Nursing Office
- Nursing Superintendent
- Deputy Nursing Superintendent/Matron
- Assistant Nursing Superintendent/Assistant Matron
- Nursing Supervisors

ii) Nursing Supervisors, which included Nursing Sisters/Sister Grade-I.

iii) Bed Side Nurses which included Staff Nurses/Sister Grade-II.

All the Nursing Administrators, 50 per cent nursing supervisors and 25 per cent bedside nurses were selected as sample for study. List of Nursing Supervisors and bedside nurses was obtained from Nursing Office and every second Nursing Supervisor and 4th bedside nurses was selected by systematic random sampling. In case of absence, refusal or not returning the questionnaire after five reminders, next nursing personnel on the attendance role was administered the questionnaire. On the last day of visit to hospital all those who were given the questionnaire were again contacted and some of them who had not returned after five reminders returned the questionnaires. These were also included in the analysis. Hence, sample included more than 25 per cent of bedside nurses and more than 50 per cent of Nursing Supervisors. However, all Nursing Administrators did not fill the questionnaire as some of them refused and others were on leave during my visit for data collection to the hospital. There were total 2165 nurses and out of them 813 completed the questionnaire. Detail is shown in Table 1.1.

### Table 1.1: Selection of sample of nursing personnel

<table>
<thead>
<tr>
<th>Category of Nursing Personnel</th>
<th>PGIMER Chandigarh</th>
<th>CMC Ludhiana</th>
<th>PGIMS Rohtak</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Sample</td>
<td>Total Sample</td>
<td>Total Sample</td>
<td>Total Sample</td>
</tr>
<tr>
<td>Nursing Administrators</td>
<td>66 56</td>
<td>29 23</td>
<td>4 4</td>
<td>99 83</td>
</tr>
<tr>
<td>Nursing Supervisors</td>
<td>242 145</td>
<td>33 26</td>
<td>92 54</td>
<td>367 225</td>
</tr>
<tr>
<td>Bed Side Nurses</td>
<td>836 244</td>
<td>400 141</td>
<td>463 120</td>
<td>1699 505</td>
</tr>
</tbody>
</table>

**Selection of Patients**

For selection of patient the different areas/ward of hospital were divided into five strata i.e. General Wards, Specialised Wards, Intensive Care Units, Emergency and Out Patient Department. The following wards were kept under these strata:
i) General Wards
   - Medical Wards
   - Surgical Wards

ii) Specialised Wards
   - Gynaecology Ward
   - Paediatrics Ward
   - Cardiothoracic Ward
   - Orthopaedics Ward
   - Plastic Surgery Ward
   - Eye and ENT Ward
   - Nephrology Ward
   - Neurology and Neuro-Surgery Ward
   - Maternity Ward
   - Communicable Disease Ward
   - Radiotherapy Ward
   - Burn Ward

iii) Intensive Care Units
   - Intensive Care Unit
   - Coronary Cardiac Unit
   - Cardio Surgery Intensive Unit
   - Respiratory Intensive Care Unit
   - Neonatal Intensive Care Unit
   - Paediatric Intensive Care Unit

iv) Emergency

v) Out Patient Department (OPD)

From each stratum of three hospitals 35 patients from each hospital were interviewed selected by purposive sampling i.e. patients getting discharge or shifted from the said area to another, going home after attending OPD. Thus, a total of 525 patients i.e. 175 each hospital comprised the sample for the present study.

Development of Research Instrument

Two different sets of questionnaires were developed i.e.

i) Job satisfaction questionnaire for nurses

ii) Patient satisfaction questionnaire
Both these questionnaires were developed by searching relevant literature on the subjects and by consulting the experts in the fields of Public Administration, Nursing, Psychology and University Business School.

i) Job Satisfaction questionnaire for nurses comprised of 3 parts:

a) Socio demographic profile
b) Job satisfaction scale
c) Open ended questions

a) Socio demographic profile comprised of subjects Name, Age, Gender, Caste, Religion, Marital Status, background educational status, number of wards/areas they worked and ward/area they are presently working.

b) Job Satisfaction Scale

Job satisfaction scale was based on Fredrick Herzberg’s dual factor theory. The questionnaire was divided into ten subscales. These subscales are based on four motivating factors i.e. achievement, recognition, work and responsibility and six hygiene factors i.e. supervision, policy and administration, working condition, interpersonal relationship, salary and fringe benefits, personal life due to job, each sub scale had 6 statements. Hence, there were a total of 60 statements were included in the scale. Nurses were asked to rate each statement on five point Likert’s Scale i.e. Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree and to each rating 5, 4, 3, 2, 1 score was given respectively making the total score of maximum 300 and minimum 60. The score in each subscale was maximum 30 and minimum 6. Total score was further divided in five sub scores as follows:

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Subscale Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Satisfied 253 – 300</td>
<td>26 – 30</td>
</tr>
<tr>
<td>Satisfied 205 – 252</td>
<td>21 – 25</td>
</tr>
<tr>
<td>Undecided 157 – 204</td>
<td>16 – 20</td>
</tr>
<tr>
<td>Dissatisfied 109 – 156</td>
<td>11 – 15</td>
</tr>
<tr>
<td>Highly Dissatisfied 60 – 108</td>
<td>6 – 10</td>
</tr>
</tbody>
</table>

c) Five open-ended questions were asked i.e. positive aspects experience, negative aspects of experience, major problems, how they achieved professional growth and general recommendations.

A pilot study was conducted of 39 nurses to test the reliability of tool. Dividing the items in even and odd numbers carried out the split half test of
instrument. The reliability coefficient rate \( r_{tt} \) was 0.87 hence the odd and even score were highly correlated.\(^{128}\) Following formula was used for calculating the reliability coefficient rate:

\[
\begin{align*}
    r_{tt} &= \frac{2 \times r^{1/2} \times 1/\sqrt{1+r^{1/2} \times 1/\sqrt{1+r^{1/2}}}}{1+r^{1/2} \times 1/\sqrt{1+r^{1/2}}}
\end{align*}
\]

Where \( r = \frac{\sum xy}{\sqrt{\sum x^2 \times y^2}} \)

ii) Patient Satisfaction Scale

Patient satisfaction questionnaire was comprised of three parts i.e.

a) Socio-demographic profile

b) Patient satisfaction scale

c) Open ended questions

a) Socio-demographic Profile

Socio-demographic profile comprised of patient's Name, Age, Sex, Caste, Religion, Occupation, Education, Residence and Income and the period of treatment taken from the said hospital

b) Patient Satisfaction scale

Patient satisfaction scale was divided into five subscale i.e. satisfaction with nurses' attitude, approach, skill, communication and preparation for discharge. Each sub scale had five statements. Hence, total 25 statements patients were asked to rate each statement on five points Likert's Scale i.e. strongly agree, agree, undecided, disagree and strongly disagree and to each rating 5, 4, 3, 2, 1 score was given respectively making a total score of 125 maximum and 25 minimum.

The score in each sub scale was maximum 25 and minimum 5. Score was further divided into five sub score as follows:

<table>
<thead>
<tr>
<th>Subscale Score</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Satisfied</td>
<td>106 – 125</td>
</tr>
<tr>
<td>Satisfied</td>
<td>86 – 105</td>
</tr>
<tr>
<td>Undecided</td>
<td>66 – 85</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>46 – 65</td>
</tr>
<tr>
<td>Highly Dissatisfied</td>
<td>25 – 45</td>
</tr>
</tbody>
</table>

\( 5 – 8 \)
c) Three open-ended questions were asked from the patients' i.e. good experience, bad experience and suggestions.

The questionnaire was translated into Hindi and Punjabi and retranslated into English. Experts in the field of Hindi and Punjabi also validated the translations.

A pilot study was undertaken on 18 patients to test the reliability of the total. Dividing the items in even and odd numbers carried out the split half test of instrument. It revealed the reliability coefficient ($r_h$) as 0.93 hence the odd and even scores were high correlated.

Apart from it levels of stress of nurses was assessed by standardised stress scale i.e. 'Are You Stressed Out' that comprised of twenty statements. Subjects were asked to say 'yes' or 'no', for each statement. 'Yes' was scored as one and 'no' was scored as zero. Hence, the maximum score was 20 and minimum zero. Score was further subdivided as follows:

<table>
<thead>
<tr>
<th>Score</th>
<th>Mildly Stressed</th>
<th>Moderately Stressed</th>
<th>Severely Stressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 3</td>
<td>4 - 7</td>
<td>8 - 20</td>
<td></td>
</tr>
</tbody>
</table>

**Methods of Data Collection**

Permission for data collection was sought from Medical Superintendent of the three select hospitals. Primary data was collected by followings methods:

i) Job satisfaction questionnaire for nurses

ii) Stress scale for nurses

iii) Patient satisfaction questionnaires for patients.

iv) Information related to organisation, structure, operational objections, and job description was collected from the nursing office.

Secondary data was collected from books, available records, bibliography and review of documents. Nurses were asked to fill self-administered job satisfaction and stress scale. Instructions were given in the questionnaire. The nurses were given the questionnaire and the questionnaire was collected on the following day. Some of them returned after four to five reminders. Patients were interviewed as per patient satisfaction questionnaire, patient himself or their attendants, if the patient was not able to answer due to the altered level of consciousness or feeling uncomfortable or in
case of children. Patients were interviewed on the day of discharge or being shifted from ICU or Emergency to general or specialized ward or after attending OPD.

**Ethical Consideration**

An informal consent was taken from all the subjects who participated. The subjects were free to participate in the study or refuse to participate. Care was taken that the comfort of patient was not disturbed during the interview. For nurses, care was taken that they are not disturbed while working with patients. Respondents were ensured of confidentiality of the obtained data.

**Data Processing**

Data was analysed by using statistical package for Social Sciences (SPSS). Data was analysed on demographic variables of nurses and patients and presented in the form of tables and figures. Test of significance i.e. ANOVA, chi-square were also applied to draw inferences.

**Chapterisation**

The present study is divided into six chapters. Chapter-I includes introduction, review of literature, scope and methodology; Chapter-II examines the organisation structure, operational objectives and job description; Chapter-III analyses the level of job satisfaction of nurses; Chapter-IV reveals level of stress among nurses; Chapter-V presents level of satisfaction of patients and Chapter-VI includes conclusion and recommendations of the study.

**References:**

2. Ibid. p. 18
9. Ibid. pp. 11-17
18 Murray Louis M. and Morris Donald R., “Professional Autonomy among Senior Nursing Students in Diploma, Associate Degree and Baccalaureate Nursing Programs”, Nursing Research, 1982(31), pp. 311-313.
35 Topt Margaret, “Noise – Induced Occupational Stress and Health in Critical Care Nurses,” Hospital Topics, 1988(66), pp. 30-34.
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73


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