4.0 Literature Review

*Quality the concept*

Quality as concept is in vogue for hundreds of years. From the last quarter of 13th century to the early 19th century, craftsmen across medieval Europe were organized into unions called guilds. These guilds were responsible for developing strict rules for product and service quality (American Society for Quality, 2005).

The roots of Total Quality Management can be traced back to early 1920's. Production quality control ideas, and the concepts developed in Japan some time in the late 1940's, pioneered by Americans Feigenbum, Juran and Deming. (Chapman. A, 1995). The birth of total quality in the United States was in direct response to a quality revolution in Japan following World War II. The major Japanese manufacturers instead of producing military goods for internal use shifted towards producing civilian goods for trade. (American Society for Quality, 2005).
Chapter 4  

Quality assurance came into prominence during the Second World War and has evolved into processes that are now adopted worldwide. Quality has been described as a fad of the early nineties and was initially seen as a model suitable only for the industrial sector.

The quality movement has evolved from Total Quality Control through Total Quality Management and moving toward the possibility of a Total Quality Society, where quality is a way of life. (ASQ., 2000). According to (Ishikawa, K. 1968) quality come first, not short-term profits.

Quality in service Sector

However more recently, Quality has been increasingly described as being suitable for service industries Lett, M. (2000). Services account for more than 75% of the GDP in most developed countries. It is therefore important to improve quality in this vital sector of the economy (Ograjenšek, I. 2002). Quality in the service sector is more than form, fit and function. Quality includes developing and implementing a good basis for a management system—a necessity in any industry or business. (Whitacre, T. 2005). Traditionally, the service sector was known to be more bureaucratic and less innovative. Innovation in service products and processes would lead to higher efficiency and performance. (Sreedharan, S 2005).
Human intervention is common practice in the service sector, which results in a lot of hidden factors. However, human resources are core to service companies. (volt Information Science.2004).

**Quality In Health Care Sector**

Some famous definitions of health service quality are as follows: 'That kind of care which is expected to maximise an inclusive measure of patient welfare, after one has taken account of the balance of expected gains and losses that altered the process of care in all its parts' (Donabedian, 1980). 'The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge' (Institute of Medicine, 1992) 'Care which consistently contributes to the improvement or maintenance of quality and/or duration of life' (American Medical Association, 1994). According to the World Health Organization (WHO) (1986), 'health' describes 'a resource for everyday life, not the object of living. It is a positive concept, emphasizing social and personal resources as well as physical capabilities.' However, the meaning of quality has remained elusive, leading to misunderstandings and hindering efforts to improve health care. Buetow (2000).

Clinical governance has been defined in the UK as 'a framework through which the NHS organizations are
accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish' (Donaldson, 1998).

Since the mid 1800, when Florence Nightingale was measuring infection rates at British military hospital during Crimean War and Ignaz Sommelweis was measuring mortality rates due to puerperal fever in Vienna, there have been attempts to continuously monitor the quality of health care, Starr, P.(1982). In the 1920's, Flexner evolved his Hospital Standardization Program, which in 1951 developed into the foundation of Joint Commission of Healthcare Organisation, which has now accredit more than 85% of all health organisations in the US, Mainz, J (2006).

During the last 30 years research has demonstrated that quality can be measured Brook, R.H. (1983). Across the world quality has fast emerged as the central focus for healthcare policy makers and service providers, ISQua (2000). Probably millions of people in developed countries have shortened life expectancy because of poor quality that neither government nor private sector policies to improve quality have succeeded. Brook, R.H. (2000). Poverty and health are closely interrelated in an often-
vicious cycle, with one being the cause or consequence of the other. Bhushan, I. (2002)

Health care delivery organizations around the world are focusing considerable attention on the definition and use of clinical quality indicators to identify health care improvement opportunities, to measure the efficacy of specific interventions, and to provide a quantitative link between qualities of care and cost effectiveness, Ballard, D. J. (2003). The "management" of quality is an integral part of "medical" management today. The health centres and professionals have to prove their value and know-how through distinct signs of recognition. Leclet, H. et al (2002). The main objective of the health service in the future would be to give a comprehensive and integrated primary health care in health institutions at the community level (Health, 1998). Commercial occupational health providers have implemented clinical governance. Its focus appears to be avoidance of failures rather than clinical excellence and patients. Preece, R. (2006). In many countries, including the United States, National quality Forum (2003), efforts have been underway to develop a national health care report card, although this remains elusive for the near future given the evolutionary state of scientific evidence about the effectiveness of health care interventions and the practicability of specific clinical indicators. "Quality" is the big issue, which is
Chapter 4

Literature Review

currently fashionable in healthcare circles in several industrialised countries. In the United Kingdom the government's White paper on the National Health Service (NHS) and subsequent documents stress that "the new NHS will have quality at its heart" London: DOH (1997).

A significant part of the challenge in measuring performance in health care derives from the disparate nature and variable perspective represented among the stakeholders, Loeb, J. M. (2004). Over the past decade there have certainly been many attempts to improve quality of care in a variety of settings. Unfortunately very few of these efforts are well documented and published, leading to a lack of evidence on the sustained impact of quality assurance processes.

Gaps between desired and actual providers performance limits the quality of outpatient care in developing countries. Identifying such gaps requires knowledge of expectations for performance and information about providers Franco, L.M. (2002). "Corruption in the health sector is a concern in all countries, but it is an especially critical problem in developing and transitional economies where public resources are already scarce." Vian, T. (2002). A study carried out by the International Monetary Fund (IMF) using data from 71 countries shows that countries with high indices of corruption
systematically have higher rates of infant mortality (Gupta, S et al. 2006). According to Kenagy J.W. et al (1999), although US health care is described as "the world's largest service industry," the quality of service—that is, the characteristics that shape the experience of care beyond technical competence—is rarely discussed in the medical literature. The high degree of discretion given to providers in choosing services for patients puts patients in a vulnerable position. In most countries health professionals have assumed a cultural role as trusted healers who are above suspicion. (Savedoff, W.D. 2004)

Patient's satisfaction with the Health Care studies originated in the U.S. in the 1950s, and during 1960s, such studies were carried out in the United Kingdom, too. Bowling, A, (1992) reports that during 1960s and mid 1970s, some 200 patient satisfaction surveys were conducted in United Kingdom alone. The recent redefinition of the patient as consumer of health care, a perspective derived from the private sector, has given greater impetus to consumer evaluation of the health-care services and market research in this area. Deterioration of the patient-doctor relationship started after World War II, when multiple technologic advances led to increased specialization in medicine. Patients were increasingly referred to consultants,
which diminished the relationship with their personal physicians. The patient-doctor relationship also suffered when corporate and group medical practices became common, and patients might not always see the same physician on subsequent visits. (Friedenberg, R.M. 2002). Patient-doctor relationships are not emphasized in medical school. (Haidet et al. 2002). Cohen (2002) emphasizes that medicine is still a moral enterprise. Many doctors have become disappointed or disillusioned by the declining income and loss of autonomy and by the facts that they no longer command respect.

Griffith’s (1983) National Health Service management inquiry in United Kingdom emphasised on quality assurance in health care and prescribed the use of market research tools to obtain consumer’s views. Patient satisfaction studies can be perceived as a product of the orientation to consumerism and recognition of the need for dialogue between service users, and service providers. According to Kieran, W. (2001), External review systems are widely used in health care to promote quality improvement in health care provider organisations, but their effectiveness is little researched and the optimal design of systems of external review is not well understood. McLver, S. and Carr-Hill, (1989), sees consumer evaluation studies as providing feedback on a service which consumers often have little influence, or any realistic choice but to remain even if
dissatisfied. Hospital that compete for paying customers have strong commercial reasons for obtaining consumer feedback about satisfaction with their products and services and acting on those results, Draper, M. (2001). India has made significant progress in the past several decades in improving the health and well being of its people. Over the past 40 years, life expectancy has risen by 17 years to 61 years, and infant mortality has fallen by more than two-thirds to 74 deaths per 1,000 live births. (The World Bank Group and Health Sector Development and Disease Control in India. 2005). In India, healthcare sector has assumed the status of an industry but one without any quality checks or standards. No attention is being paid to make the healthcare delivery system cost-effective and assure quality. There are no standards prescribed for the laboratories and not even a law that all laboratories should be accredited, (Nair, 2004). According to Balagopal, C (2004) in India about 80 per cent of the products used in the healthcare sector does not have any standards and would not be used elsewhere in the world. Scrivens, E. (1988) thinks Consumers are not empowered merely by voicing their opinion on quality of health care providers. Whatever may be their view it is not in their control to determine the type of service that is provided, he observes:
The "supermarket model" of health care denies patients and consumers the right to consultation about investment, to what should be "on the shelves" and does not encourage consumers to seek redress if the products are faulty.

The association between economic performance and quality of care is an essential aspect of the production of health services, Laine, J. (2005). Health spending across industrialized countries almost doubled in the last thirty years; meanwhile, the highest spending countries are not always the ones with the best results. Anderson, et al., (2003)

Defining and measuring the quality of care in long term care facilities is a multidimensional and complex issue with several pitfalls, Berg, K. (2002). According to Wisniewski, M. (2005), service quality for patient's perspective should be routinely monitored and assessed.

A large number of studies on health care quality have been conducted worldwide; in 1994 only over 1000 articles on 'Patient Satisfaction' were published in the medical and nursing literature, Wood, S.J. (1997).

There has been a considerable increase in the reporting of clinical indicator data in the US, England and Australia. The purpose of these reports is to allow health system to assess, compare and ultimately improve the care provided by hospitals.
Chapter 4


No one publicly owned and funded organization in New Zealand has as its entire focus the development of quality improvement; measurement of quality; clinical governance; and quality in the health system. (Coster, G. 2001).

The health care system of the US excels in its capacity to treat serious illness. Yet, American health care is troubled. Physician satisfaction, respect for physicians, and trust in our health system are declining. In 1994 opinion polls, 75% of Americans said that our health care system required fundamental change, and 84% said there was a crisis in health care, Gallup/CNN/USA Today (1994).

According to ISQua (1999), Short life expectancy, high infant mortality rates and other indicators of poor health status as compared with western countries a serious indictment of the low performance of the existing Central and Eastern European health care systems.

To appreciate the importance of striving for quality in relation to health, it is necessary to be aware of just how extensive are
Chapter 4

Literature Review

the differentials in health found in Europe today, Whitehead, M. (2000). A child born to professional parents in the UK, can expect to live over 5 years more than a child born into an unskilled manual household, Black, D. (1980). In France, the life expectancy of 35 year old university lecturer is nine times more than that of an unskilled labourer of the same age, Jozan, P (1984). In Spain, twice as many babies die among families of rural workers that among those of professional, National Population Trends (1981).

A study conducted in Greece wondered about hospital service, bad diagnosis, unnecessary treatment, over prescription of drugs and lab test errors, Karydis, A. (2001).

Health reforms in Chile, as in many countries in 1990's has focused on structural change, cost containment, the introduction of market mechanism, and a increased emphasis on consumer involvement and choice, Buchan, J. (2000).

Continues Quality Improvement implementation in Korean hospitals were the use of scientific skills in decision making and the adoption of a quality information system capable of producing precise and valid information, Lee, S. (2002)

During the last few decades the health system in Israel has shifted focus from the patriarchal approach of 'the doctor knows better' to a patient centred approach. More than ever
before, the patient, or client, is now able to choose his or her health service providers (Physician), Epel, O. B. (2001)

Only one-fifth of the population in rural Burkina Faso uses modern health service, Baltussen, R. (2002). In Lithuania the quality of health care services has become important issue and consumer satisfaction has been recognized as a factor that contributes to quality of care. According to Viroj, T. (1999), The Thai health system is typical of many East and South East Asian countries in having a mixed economy or health care. Clear and significant differences emerged in Patient satisfaction between groups of hospitals with different ownership. Non-profit hospitals were most highly rated.

In some under developed countries like Ethiopia condition of Health sector is very grim, according to a study the Ethiopian health care delivery system has historically been unable to respond quantitatively or qualitatively to the health needs of the people. The 'crude' death rate is estimated by different sources to be 14.8 per 1,000 population, about double that of Kenya and second only to Uganda in Eastern Africa. Life expectancy at birth (LEB) of males and females is 49.7 years and 52.4 years respectively. The infant mortality rate (IMR) is estimated at 105 per 1,000 live births while the child mortality rate (CMR) is 172 deaths per 1,000. The maternal mortality rate (MMR) is estimated at 500-700 per 100,000. Health (2004)
Chapter 4

Literature Review

Even in developed countries like UK, High profile failure of health care have kept the spotlight on methods to monitor the quality of health service, Mant, J. (2001).

In the economic reforms era, the old maxim, 'Health is wealth' could easily be replaced by 'Health generates wealth'. For that is what seems to be propelling the corporate world in taking an increasing interest in the country's health sector. Slowly, but surely, the private sector is enhancing its investments in this area and working out a strategic plan to tap the vast potential market that is seeking quality medical care. Mehra. P (2002).

Various studies have been conducted based on various demographic and other variables.

4.1 Indian Literature

There seems to be paucity of literature on the subject in India. However, some studies have been conducted which tries to evaluate different aspects of the health service industry. Academic, governmental and private agencies have conducted studies in different parts of the country on the subject. Duggal R. and Amin (1989) in their study conducted in six villages of Jalgaon district in Maharashtra and six wards (including two slums) of Jalgaon city analysed various aspects of household health expenditure in order to evolve a methodology for the study of health expenditure. Jalgaon was selected for the study in terms of its socio economic development. A stratified
random sampling method was employed to select 1,629 households from both rural and urban areas of Jalgaon City. An interview schedule was administered to the household at three different points of time during the year, in order to take into account the seasonality factor. The recall period was 30 days. The findings of the study showed that the overall monthly prevalence rate was 148.89 illness episodes per 1,000 populations, and the incidence rate was 96.56 per 1000 population. Of the acute illnesses 83.45% were treated by the private practitioner / hospital, whereas public facility utilization was only 9.07%. Of these cases, 70% received injections as part for their treatment. The study brought out the fact that the perception of illness depended on the purchasing power and the income level of the people. The lowest class had the highest non-utilization rate, the lowest private facility utilization rate and the highest public facility utilization rate. The per capita annual expenditure incurred by the household on health worked out to Rs.182.49. This was 7.64% of the total consumption expenditure, and 9.78% of the reported income.

Pandey, B.N.K.(1993) Conducted a Study of the State of Medicare Facilities in Agra City (With Special Reference to Medical Practitioners) This study aims at the nature and standard of health care delivery by qualified private practitioners. It also explores the nature of private practice and
Chapter 4

Literature Review

the cost effectiveness of their services provided. It is a case study of selected private clinics in Agra. It is an exploratory study, which looks into the condition of these clinics.

The study revealed that a majority of these practitioners belong to the 30-40 year group and are engaged mainly in private practice. A majority of these doctors who had joined for M.B.B.S. after intermediate want to acquire specializations. A majority of them have five years of experience and prefer to practice privately. Their practice is mostly specialty-based rather than general practice. They have trained technicians as their supporting staff. Routine first aid is the primary service provided by these clinics. Other preventive services such as immunization, anti rabies, and anti toxic services are secondary in nature. Many doctors are found to charge additionally for these facilities and the consultation charges of these practitioners range between Rs. 30-35 for each alternate visit and their daily earnings are between Rs. 300-500. Most of them refer their patients to specialist doctors due to inadequate facilities available in their clinic. Most of the patients who use these services are from the upper middle class. A majority of the practitioners interviewed are of the opinion that services have become commercial as a result of increased competition. This, in turn, has led to a number of undesirable, unfair
practices. This study shows that there is a trend towards specializations rather than general care. Here, the emphasis is solely on curative services with minimal preventive inputs. The earnings by these doctors' ranged from Rs. 10,000 to 15,000 per month. This trend requires regulation of medical practice in both government and private institutions. Some process needs to be initiated at the state level, which at the moment is lacking. The same year in the same city another study was conducted by Ramkishan, B. (1993) on "A Study of the State of Medicare Facilities in Agra (with special reference to Nursing Homes of Agra)". The study focuses on the infrastructure facilities available at nursing homes. It also studies the qualifications and experiences of service providing professionals in the nursing homes. A survey of a few nursing homes in Agra city was conducted for this study.

The study shows that the average academic qualifications of the service providers in the nursing homecare varied. Fifty percent have passed the intermediate; forty percent are graduates and another ten percent are postgraduates. The postgraduate doctors are either BAMS (Bachelor of Ayurvedic Medicines and Surgery) or BHMS (Bachelor of Homeopathic Medicines and Surgery) qualified or eighty percent of these practitioners practise allopathic medicine.
About 30% of the professionals have 15 to 20 years practice, followed by another 25% with 10-15 years, 25% of them have 5-15 years and 20% of them have only 0-5 years of experience. A majority of them (90%) act as consultants to various nursing homes on a casual basis and the remaining 10% are employed temporarily in these nursing homes. Most of the nursing homes i.e. 85% have employed paraprofessionals who are intermediate (12th standard) or Matric pass. Not a single pharmacist was found during the study in these nursing homes. About 25% of nursing homes have employed technicians who are intermediate (12th standard pass). A large number of nursing homes i.e. 90% refer their patients to other hospitals (both government and private) due to inadequate infrastructure facilities at these nursing homes. 85 per cent of the total hospitals in the private sector have a capacity of less than 25 beds. Of the registered doctors in allopathic system with the Medical Council of India. Bhatt, R. (1993). In a mixed public and private system, such as in India, the private sector tends to focus on services which are easy to make quick profit and the public sector may have to carry the unprofitable activities. World Bank (1987).

The consultancy charges range between Rs. 25/- to Rs. 50/- per patient and the bed charges range from Rs. 50/- to 150/- per
bed. The private room charges lie between Rs. 100/- to Rs. 200/- per day excluding the additional nursing charges. The average number of patients admitted to these nursing homes are 171 in private rooms as compared to 240 patients in general wards. The average income of nursing homes in Agra city around is Rs. 53,000/- per month. In a small town in Uttar Pradesh, the study shows that fifty percent of the promoters were unqualified. This is different from the trends observed by studies of private institutions, in large cities, which are mainly promoted by practitioners at least with an MBBS degree. This kind of a trend has implications for quality of care and raises the need for ensuring some minimum regulations. From study it is also evident that nursing homes are earning quite a substantial amount per month. This raises questions regarding over-charging of patients, and the quality of services being provided by these nursing homes. Desai, N.K. (1997) undertook a study titled Psychosocial Study of Selected Health Problems in Low Income Urban Colonies of South Delhi. This study primarily focusses on problems faced by people from low-income families, their relationship with the family environment and its influence on health perception and behaviour. This study was conducted in a resettlement colony in South Delhi. To study the psychosocial aspects of selected health problems, across three urban colonies in Khanpur area of Delhi. To asses
the family environment in households across these colonies, and study its relationship to health problems. This study was done in three types of urban slums, which included a resettlement colony, an unauthorized colony, and an urban village, all seen as part of a continuum. Forty households were chosen on a random basis from each of the categories mentioned above. These were essentially in-depth case studies and focussed on selected health problems. These included fever, diarrhoea, alcoholism, mental retardation, epilepsy, skin infections, tuberculosis, psychoses, gynaecological problems, STD and AIDS.

The physical and socio-economic conditions were the poorest in the unauthorized colony, followed by the resettlement colony and then the urban village. The extent of family support networks also varied across the three types of settlements. When asked about satisfaction with different providers viz. private clinic or nursing home, government hospital and alternate systems of medicine, a very high percentage of the study households (95-97 percent) expressed satisfaction with private clinics. The households in the unauthorized colony expressed the high satisfaction levels with government hospitals while only 70 percent of the households in resettlement and 75% in urban village were satisfied with the government hospital. The proportion of households, which
found alternate systems of medicine satisfying, was high in all three settlements. Across all three settlements there was a difference in type of services sought for various types of ailments. For a number of acute conditions like fevers and diarrhoea and skin infections the majority of the households resorted to the private practitioner. For chronic ailments like tuberculosis, and STDs there was less reliance on the private practitioner; around 40-60 percent of the households relied on the public hospital. For conditions like mental retardation, epilepsy and psychoses a large proportion used the public sector hospitals. This study points to the selective use of private practitioners for treatment of illnesses in the three settlements where the poor predominantly reside. For acute conditions they resort to private practitioners but for several chronic ailments there is greater reliance on the public hospitals. This kind of resort pattern requires the importance of strengthening the public sector and working out referral systems from the private to public sectors in case of all diseases. There is also a need to develop management and reporting systems for specific diseases for which people resort for treatment to the private sector. Andhra Pradesh Vaidya Vidhana Parishad is conducting patient satisfaction surveys biannually in their hospitals. These surveys are the first of its kind for public hospitals in India. Measurement of patient’s
satisfaction with services provided by the concerned hospital is important from two angles. Firstly, patients constitute the hospital's direct clientele. Thus overall satisfaction of the patient is an important aspect of the service itself, apart from other dimensions like technical quality of medical care, effectiveness clinical care etc. Secondly, patient's satisfaction provides an indirect measure of the other dimensions as well. The study obtains feedback from patients and, in case the patient could not be interviewed, the attendant. For the survey a modified version of the Patient Satisfaction Questionnaire-III originally developed by Ware and others (Hays, Davies and Ware, 1987) is used. In each hospital, patients are identified through stratified random sampling. Stratification is on the basis of gender and wards. Objectives of this survey are:

- To estimate the indices of patient satisfaction with Andhra Pradesh Vaidya Vidhana Parishad hospitals;
- Identify and report on the perceived strengths and weaknesses of the health care services provided to patients in Andhra Pradesh Vaidhya Vidhana Parishad Hospitals;
- Provide Hospitals the information about their quality improvement initiatives with respect to services provided to the patients.
Chapter 4  

**Literature Review**

- Provide data to allow hospitals to measure their performance in the sphere of providing care to patients as compared to similar hospitals.
- To build up evidence and information about the functioning of the hospitals and satisfaction level of the people with regard to “Care, Courtesy and Comfort of the patients”.
- To help the Andhra Pradesh Vaidhya Vidhana Parishad management to take appropriate allocative and managerial decisions for utilization of public hospitals by people who need them most and to improve the quality of their services.

The Key indices in the questionnaire, used in this study are grouped into the following seven sub-scales, as in case of PSQ-III

1. Access - Availability - Convenience
2. Communication
3. Financial Aspects
4. General Satisfaction
5. Interpersonal Aspects
6. Technical Quality
7. Time spent With Doctor
Chapter 4  

The survey also asked patients to comment on following aspects: General facilities, Medication and Supply of drugs, Drug Dietary Services, Toilet and cleanliness, Shortage of Staff, Interpersonal aspects, Water supply, Miscellaneous, Corruption by hospital staff, Linen and laundry, Diagnostic services, Utilities).


In the absence of accountability, our health outcomes are worse than those of many Asian countries. Patnaik, I (2006, B).

Cfore conducted a study India’s Best Hospitals in Delhi, Calcutta, Chennai, Bangalore, Hyderabad and Mumbai in 2002. Hospitals offering specialisations in the area of cardiology, gastroenterology, infertility, oncology, ophthalmology and mental health were chosen to be ranked. A preliminary survey was conducted among doctors to identify hospitals, parameters and corresponding weightage for evaluation. Five parameters were identified: competence of doctors (weight age 0.3), infrastructure and facilities (0.3), value for money (0.2), attention to patients (0.1), and cleanliness (0.1). The weight age were based on the importance given to each parameter by doctors surveyed. A questionnaire was designed and after pre testing, administered to doctors of different specialisations. In
all 679 doctors were contacted. The respondents were asked to rate the hospitals they were familiar with on a 10-point scale. Each hospital was evaluated by at least 10 doctors for a particular specialisation. The hospitals were ranked based on the aggregate score.

A similar exercise was followed to rank the top five hospitals in different disciplines in the country.

4.2 Research Gap

The available literature surveyed, reveals that, in most studies patient satisfaction has been given maximum importance, and none of the studies emphasise the issue from the doctors perspective. The Quality indicators have also been ignored by the studies like what actually satisfies a patient/attendant? What actually a patient is looking for? What are the factors that patient gives maximum importance to while selecting a Hospital or a Doctor? If we can find these factors then satisfaction will come automatically. No study has covered these twin aspects. Although a study by Cfore has tried to rank order the hospitals from best to worse but here, too, the study confines itself to the top hospitals only and that too of a particular city or specialisation, normally out of reach of common masses. Since commercial viewpoint remained on the forefront of the study look at quality as beneficial to the doctors and not the patients.
It may be said that customers are the kings. However, here majority decisions are taken by the patient's attendants and not by the patients themselves, as many of them would not be in a position to even communicate. None of the study has tried to study the perception of attendants.

The studies carried out by authors on foreign lands may not be applied to Indian conditions. Even if we look at Indian Studies, either carried out in a particular city or hospital results of which can either be generalised with huge amount of reservation or at time would be difficult to generalise. Further, we could not find any study that has tried to analyse on the basis of different demographic variables like gender, qualification, location etc. They have not even tried to study on the basis of different dimensions, like qualification dimensions, location dimensions, physical factor dimensions etc.