CHAPTER - I

SOCIOLOGY OF HEALTH & NUTRITION

CONCEPTUAL PERSPECTIVE

- Introduction
- Sociological Concepts
- Review of studies in India
- The Problem
- Method of Study
Human resource development begins from the stage of conception of the child and could relate to the following developmental stages: pre-natal, post-natal, infancy, childhood, teenage, youth, adult and old age. During these stages the most important aspect to be attended to is health and nutrition of the child. These would take care of the rest of the development. To fail to protect young children at the critical ages of their growth and development is to wreak lasting damage on a whole generation, the results of which may well have effects on economic development and welfare for decades ahead.

Pertinently the World Health Organization views health as 'a state of complete physical, mental and social well-being and not merely as the absence of disease or infirmity'. Thus Health is not merely a biological phenomenon, it is equally related to the social phenomena.

The recognition of the fact that the health of an individual is more than a biological phenomena has brought into forefront the significance of behavioural dimensions of health.
Accordingly several sociologists in western countries have endeavoured to study the problem of Health in relation to Individual and Society and have contributed to the field Medical Sociology by proposing new concepts and by making useful observations. Here an attempt is made to review briefly these efforts.

First of all Hyman (1968) makes distinction between two types of sociologists. One set of them utilising the medical settings as convenient "strategic" places for the testing of general sociological theories; and the other involved in the application of sociological theory and research to the solution of medical problems. He considers the first category of sociologists as with 'deductive' orientation and the second with 'inductive' orientation.

Mechanic (1978) observed that as a consequence of cultural relativism every society views health problems from the perspective of its own culture and provides coping responses according to the understanding, knowledge, values, attitudes and beliefs of the people.

Kark Sidney (1974) viewed that, all communities have their concepts of health integrated as part of the total culture. Associated with its values and beliefs about health, every community has its well established
ways of maintaining health, preventing disease, and
treating the sick—people differ in their daily functioning, their status and roles and in the way they relate
with one another. Inability to fulfill normal expectations
in these respects, whatever the expectations are for
different people in various communities, is often a
reflection of illness.

S.R. Mehta (1984) points out that the health
needs of people are related to the community social
structure and would change according to the changes
observed in it. The health behaviour of an individual
to a large extent, will be determined by the attitude,
motive and normative pattern often influenced by the
social, psychological, cultural and economic factors
operating within and without the social structure of the
community or society.

Cockerham (1978) considers that each society's
definition of illness becomes institutionalized within
its cultural patterns, so that one measure of social
development is a culture's conception of illness.

Dingwall (1976) observed that illness may be
viewed as a form of failure at every day life, a disrup-
tion in the 'familiar and taken for granted' state of
affairs between subjective experience of one's own body
and one's knowledge of what is normal experience or conduct determined by a competent member of some collectivity. Thus ethnomedicine considers medical knowledge invoked by the physician to interpret a patient's behaviour identical to the knowledge invoked by a lay person to any other person's behaviour or conduct.

Dorrian Apple (1960) noted that layperson's judgements about whether or not a person is sick based upon two criteria; i) the recency or novelty of the experience, behaviour or attribute; and ii) the degree to which the experience interferes with normal activities.

SOCIOLOGICAL CONCEPTS:

The prominent conceptual explanations in regard to illness and illness-behaviour, or sick role are functionalist theory (Talcott Parsons: 1951); Labeling theory (Howard Becker: 1973); Health Belief Model (Rosenstock: 1966).

According to Functionalist theory, illness is dysfunctional because it threatens to interfere with the stability of the social system. This analytical approach is the basis for Parson's theory of the sick role. Talcott Parsons (1951) is the first one to view
illness as deviance and to postulate his concept of the sick role. Illness can be viewed as a deviant social state brought about by disruption of normal behaviour through disease. The basis on which illness has been defined as a deviant behaviour violating the social norms within a given social system. This functionalist approach to deviance through the concept of Parson's "sick-role" views sickness as disturbance in the "normal" condition of the human being, both biologically and socially, (Parsons 1951). Parsons (1951) postulates that being sick is not just experiencing the physical condition of a sick state, rather it constitutes a social role since it involves behaviour based on institutional expectations and is reinforced by the norms of society corresponding to these expectations.

Howard Becker's (1963) "Labelling Theory" is based on the concept that what is regarded as deviant behaviour by one person or social group may not be so regarded by other persons or social groups. In the process of seeking medical care two persons having similar symptom may behave differently.

According to Rosenstock's (1966) "Health Belief Model" an individual's perception that he or she is personally susceptible and that the occurrence of the
disease would have severe implication of the personal nature motivate him or her to go in for preventive practices to avoid illness.

In the sociological studies on Health, the relationship between unequal stratification system and Health status gained considerable importance in the west.

Good health is an obviously important human condition, but unfortunately for those toward the bottom of the stratification system good health is to some degree unequally distributed through the stratification system. There are two basic reasons for this, first adequate health care is unequally distributed and second conditions promoting better health are unequally distributed. A second reason good health is unequally distributed is that a low income often means poor nutrition, less sanitary living conditions and less knowledge about how to maintain better health. A lower position in the stratification system means a more unhealthy work environment (Herbo, 1983).

The relationship between unequal distribution of income and health shows that chronic diseases are more prevalent among those with lower incomes. Further that the number of days per year people are disabled due to illness is strongly related to income. In short
along with an unequal distribution of income the stratification system also operates to distribute good health unequally (Herbo, 1983). An unequal distribution of good health can be found in a number of statistics. For example infant mortality is an often used indicator because it is a condition that can be reduced with better medical care. The data shows lower the income, higher the infant mortality rate in the United States. Furthermore, it is important note that with the best medical technology and knowledge in the world, the United States has a relatively high infant mortality rate among industrialized nations. A prime reason for this poor standing by the United States may be that its distribution of medical care is based more on the ability to pay than on need (Herbo, 1983).

REVIEW OF STUDIES IN INDIA:

While Medical Sociology has made considerable headway in the west, it is comparatively a new development in India. A review of literature on the studies made in India in this field reveal that the studies dwell on such areas of interest as:

- Structural & Processual Analysis (Madan: 1972, 1980


- and Sociology of Medical profession (Ahuluwalia:1974; Sharma : 1981; Nagla : 1982 etc.).

Structural processual studies largely emphasized on social background of the medical professionals and patients and the occupational role of professionals. Studies on social background/status reveal that the socio-cultural and economic status of the patients and medical professionals would:

- influence the interaction pattern (Srivastav: 1979);
- affects the course of therapy (Mathur : 1975);
- determines the conception of illness (Nagla : 1980);

and

- the choice of treatment (Advani : 1980).

The studies on professional roles report that:

- medical profession is only divorced from prevailing socio-cultural conditions (Madan : 1980);
- Physicians can perform their roles without considerable emotional involvement (Ramanamma: 1978);
- Doctors & Patients are acquiring affective neutrality and universalistic, specific and rational dimensions (Nagla: 1980).

Nagla (1980) reports that the professionals in this (medical) field are largely drawn from elite classes of society comprising people of higher castes and classes, urban bred and with attitudes and value orientations different from that of a large segment of population.

Madan (1980) in his book Doctors and Society points out that medical profession is only divorced from prevailing socio-cultural conditions but it also encourages the acquisition of all qualifications for their own sake.

Srivasthav's (1979) study on nature of interaction revealed that illiteracy and language problem are major barriers to closer interaction among doctors, patients and para-medical staff; the dissatisfaction among the para-medical staff indirectly affects the doctor-patient interaction; and further his data provides partially that the patients' approach the problem of health and disease according to the cultural norms which they adhere to.
Advani (1980) in his doctoral work noted that the socio-economic status determines the patients' choice of the hospital, mode of treatment and level of satisfaction.

Mathura* (1975)* study on the human organisation of a hospital attached to a medical college in Rajasthan revealed that the physical and social environment provided to a patient has a therapeutic significance and can accelerate or impair the patients' recovery.

Venkatarathnam (1979) observed that universalistic criteria against particularistic demands are conspicuously absent in the hospitals.

Madhu Nagla (1982) made a study on sociology of Medical Profession: A Study of Doctors at Medical College Hospital, Rohatak in the state of Haryana. Her data reflects that a larger representation of medical professionals are from higher castes & classes. Further her data revealed that the course of therapy is affected significantly by the patients socio-cultural and economic background and their conception of illness. On the strength of her study Nagla concludes that both the doctor and the patient as a member of the changing society are getting self-oriented and the interaction between the two is acquiring affective neutrality and universalistic, specific and rational dimensions.
The studies on Doctor-Patient relationship bring out the significance of social structural and psycho-cultural factors in understanding the problems of doctor-patient relationship and also availing the medical care.

Marriott (1955) using social structure as a primary reference in his study on western medicine in a village in northern India viewed that there are three realms of human groups for the village—folk kinship, caste and outside world, and each of these commands different degrees of trust, while the first two are trusted more, the latter is met with suspicion.

Marriott observed that village folk have developed their preferences for certain methods of diagnosis and treatment while seeking medical care. They attach greater curative value to injections. Marriott writes:

Villager's fascination with diagnostic and predictive powers of thermostat and stethoscope has already forced many indigenous physicians to add these to their kits even though they may understand little about the actual use of such instruments. (1955 : 259)

Gould (1965) too has made a similar observation in Sherupur. Newman et al in a report on the study of the
role of indigenous medicine practitioners in two areas of India have reported that the more successful of these practitioners make widespread use of modern medicine frequently in combination with indigenous remedies.

Hassan (1979) presented a case study entitled 'Doctor-Patient Relationship' in his book on Medical Sociology of Rural India. He reports that Modern Medical Practitioner was consulted and his prescriptions accepted especially when either the causes of diseases were not understood or more elaborate forms of treatment were not available.

Leslie (1968) mentions that the physician who does not try to understand in cultural and intellectual level of the village folk and does not develop respect for cultural differences proves to be less practitioner in village dispensaries.

Nagla (1980) reports that the characteristic feature of personal quality between the physician and the patient common to modern or westernized societies could not be maintained in the village life.

Advani (1980) in his doctoral work of Doctor-Patient relationship in General Hospitals in regard to doctor's preferred role relations with patients found that Doctors subscribe to Parson's affective neutrality
perception in order to avoid emotional involvement with patients.

In her study Nagla (1982) concludes that the relationship in the hospital setting between the doctor and the patient is becoming more contractual in nature than based on human relations.

Carstairs (1955) a medical psychiatrist and Anthropologist collected some valuable data on medicine and faith in Rural Rajasthan. Carstairs approach was psycho-cultural. He related the patients' expectations to the general climate of the community. According to him the acceptability of modern scientific system of medicine is possible in three ways: By the slow diffusion of information about sepsis and infections; by a better understanding of the expectations with which the people approach the doctor; and by presenting new techniques in a way which will link them up with what they are expected to supercede.

Social science oriented studies in the field of Nutrition indicate that Sociologists have shown lukewarm interest and others have evinced more interest. Most of these studies are generally brought by methodological difficulties in establishing cause and effect relationship and hence ensured continued debates,
Nevertheless these studies do stress that --

- Health and Nutritional status of a population is an indicator of development;
- Health and Nutritional inputs must take precedence in socio-economic environment which determine the growth and development of human organism, opportunities for acquisition of skills, social placement in life and the quality of life enjoyed as an individual or community member;
- Malnutrition is in and of itself a major deterrent to economic development;
- Labour (social) productivity and social contribution have been limited in under-nourished groups due to a limitation of growth & development, physiological capabilities and acquisition of skills;
- Growth retardation or shortness measured in terms of deviation of height indicates social deprivation.

David and Richard (1972) in their evaluation of the economic consequences of malnutrition hypothesised that malnutrition in a society results in a degradation of the human being which in and of itself is a social problem that cries for solution.

In his study, on 'Health and Productivity in Poor Areas', Malenbaum (1970) found that better health
status as indicated by low infant mortality rate was associated with higher economic growth rate. Similarly, Norman Hicks (1980) in his working paper on "Economic Growth and Human Resources", observed that longer life expectancy was associated with higher economic growth rate. Correa and Cummins (1970) reported that Health and Nutrition together could account for 5 per cent of economic progress of nine Latin American countries.

Spurr et al (1977) found that productivity among sugar cane cutters was positively influenced by some indicators of nutritional status and functional capacity. Viteri (1971) in his study of considerations on the effect of nutrition on the body composition and physical work capacity of young Guatemalan adults had shown that better nourished Guatemalan peasants were able to complete their assignments in about half the time as compared to poorly nourished peasants who were receiving no supplements. He had also found that better nutritional background was associated with greater physical work capacity than those with less favourable background.

A few studies also reveal the connection to childhood nutritional background, adolescent growth and work capacity and wages earned by adolescents.
Gopalan (1983) pointed out that all growth retardation (apart from these genetically determined or due to hormonal defects) is a reflection of under-nutrition.

Satyanarayana et al (1979; 1980) in their longitudinal study of twenty years duration on about 900 boys found that chronic under-nutrition is not an isolated phenomenon. Majority of the children from socially and economically background families had suffered moderate and severe degree of growth retardation. They have ended up as shorter and lighter adults; illiterate or with very few high skills; employed for manual work in farms or unskilled factory work; and are enjoying very low quality of life. More specifically their longitudinal study reveals —

Undernourished boys represented the least nutritional plane with nearly three years growth lag at age five—every fifth child in this group had suffered from either Kwashiorkor or Marasmus in its early life. Chronically under-nourished adolescents had significantly low physical work capacity; 60 per cent that of normal adolescents. They had to strain themselves to handle a standard workload (300Kpm/min) while their normal counterparts could do the job with relative ease as it was not
a major load on their total capacity. It may be noted that even the moderately under-nourished group had a measurable handicap.

Wages earned by 151 adolescent boys employed by farmers were significantly related to age (−0.42) body weight (−0.61) and height (−0.52) at the time of the study. Better paid boys weighed more at corresponding ages and a greater proportion of them had a better nutritional background at ages 5 than those who were paid less. Better nourished boys were sought after by the farmers and were assigned to the more demanding agricultural jobs and were paid higher wages that went with those jobs. These observations points out the important influence of nutritional anthropometry on agricultural wages in real life situations. (Satyanarayana, Nadamuni Naidu and Narsing Rao: 1979; 32, 1769).

Unlike better socio-economic environment observed in well to do families in urban areas, majority of socially deprived reveal house-holds consist of families with no land of their own, illiterate mothers and fathers, doing out a living from seasonal agricultural labour. We have evidence from our longitudinal study that only about one sixth of children from such
poor families could be considered as normal. On the other hand, more than half of the children from landlord families with more than five acres of wetland were found to be normal height for age between mean and mean -2S.D. of referal value at 5th year of life. In such situations growth retardation or shortness measured in terms of deviation of height from Indian or Western referal values becomes a social indicator of deprivation. (Satyanarayana 1988 pp.5).

A general relationship between childhood nutritional anthropometry and adult heights and weight was also pointed out earlier by Jackson (1966) from ICNND Cross-sectional multinational data.

Satyanarayana (1988) in his review article concludes that smallness of deprived communities is achieved at considerable cost of learning time and opportunities for acquisition of functional skills due to ill health and malnutrition in childhood. Growth retardation in children and smallness in adult life in deprived communities are indicators of under development.

STATEMENT OF THE PROBLEM:

What emerges from the above review is that health and nutritional status are inter-related and form an important part of socio-economic, cultural environment,
which determine or deter the overall development. The review also reveals that there is paucity of empirical studies. The paucity of studies make it difficult to establish cause and effect relationship and to arrive at more specific generalizations and thus restrict the verification of conceptual validity and formulation of more meaningful social policies. Most of these studies were carried out in a hospital setting than in real rural situations, and stress on the structure and processual aspects of doctors and patients.

What is not clear from the above review is that the influence of mother's value orientation in relation to children's ill health. Similarly, it is also not clear the influence of such socio-economic variables like type of family, size of family, mother's age, caste, income etc., on the nutritional status of the pre-school rural children.

These issues assume importance in view of the facts that a prepondering majority live in rural areas, without health infrastructure, education etc., and in view of the transmission of structural units like family, norms with regard to the size of the family and mass prevalence of poverty.
In the present study therefore a humble effort is made to examine these issues in the context of villages in a semi arid district.

METHOD OF STUDY:

More specifically the following objectives are framed to examine the above mentioned issues:

1. To examine the health status of the general population in the region under study with reference to mortality and morbidity trends;

2. To examine the socio-economic status of the pre-school rural children and their parents;

3. To understand the knowledge, awareness and practices of the rural mothers with regard to health care and illhealth;

4. To examine the nutritional status of the pre-school rural children with reference to the degree and duration of malnutrition;

5. To analyse the relationship between social background variables like age, sex, type of family, size of family, caste, income and age of the mother and nutritional status of the pre-school rural children; and
6. To examine morbidity status in relation to nutritional status of the rural pre-school children.

The following hypotheses are formulated for the verification of statistical significance.

1. There is a difference between the age and the nutritional status of pre-school children;
2. There is a difference in the nutritional status of male and female pre-school rural children;
3. There is an association between the types of family and the nutritional status of the pre-school children;
4. There is a difference between the small and large families and the nutritional status of the pre-school children;
5. There is a difference between the younger and older mothers and the nutritional status of the pre-school rural children;
6. There is a difference between nutritional status and the caste background of the pre-school rural children;
7. There is an association between the income
of the parents and the nutritional status of the pre-school rural children.

UNIVERSE: The present study is carried out in Anantapur district, the semi-arid zone of Andhra Pradesh state. The pre-school children and their mothers of four villages in Anantapur district form the universe of present study. The study was undertaken in Jayapuram, Cholasamudram, B.Pappuru and Duggumarri, which represented typical villages of Anantapur district.

SAMPLING: At first mothers having 2-5 years age group children are enumerated. Our enumeration revealed a total of 210 such mothers. \( \frac{1}{3} \) of these mothers (33.33 per cent) were selected randomly. These mothers have a total of 83 pre-school age group children. As there was no proper records and good number of mothers happened to be workers, random sampling method alone is found to be suitable and hence the same has been adopted.

TOOLS OF DATA COLLECTION: For the purpose of data collection survey method is adopted and an interview schedule is administered to the mother. The interview schedule intended to gather such information as socio-economic characteristics; mother's knowledge, awareness practices in relation to health; and the morbidity trends of the children.
The nutritional status information is gathered by adopting Anthropometric measures. The weight of the children is measured by using clinical balance, commonly used by doctors. The height is measured by using coloured height stick.

In addition secondary data pertained to mortality and morbidity are collected from the records of District Medical and Health Office, Anantapur.

ANALYSIS: The collected data has been analysed and presented in simple tabular forms and wherever necessary percentages are calculated. The data has been analysed with the reference to such variables as age, sex, caste, type of family, size of the family, occupation, income, variable wise analysis is attempted where ever appropriate.

Further, for the assessment of nutritional status, particularly to assess the degree and duration of malnutrition Gomez and Waterlow gradings are adopted respectively. For the purpose of comparison of nutritional values referal values published by National Institute of Nutrition Scientists (Vijayaraghavan, Hanumantha Rao et al) are used.

An effort is also made to analyse the data more vigourously by using such statistical techniques
as chi-square technique, particularly in the analysis of the verification of the hypothesis formulated.

LIMITATIONS: A more vigorous and scientific sampling could not be attempted due to the high degree of sensitivity of the villagers and also because of the paucity of time and finances. Another limitation of the study is the weighing balance that is used for measuring the body weights of the children. A beam or spring balance would have been much more appropriate. Due to non-availability of such scales they have not been adopted.

An important limitation of the present study is the small size of the sample. Therefore, broader generalizations cannot be arrived at. The study is undertaken as a pilot study prelude to a more vigorous and large scale study.

CHAPTERIZATION: The present study is organised and presented in as many as six chapters. The first chapter provides conceptual insights into the Sociology of Health and Nutrition and a brief review of studies undertaken in India. This chapter also sets out the problem of the study, objectives and method of study adopted.

The second chapter attempts to enlighten the profile of the region under study and health status of its population with reference to mortality and morbidity trends.
The third chapter provides insight into the profile of the villages under study and the socio-economic features of the subjects under study. It attempts to picturise the socio-economic environment of the subjects.

The fourth chapter endeavours to explain the levels of knowledge, awareness and practices of the rural mothers under study.

The fifth chapter is concerned with the health and nutritional status of pre-school children. In this chapter an attempt is made to analyse the degree and duration of malnutrition and its relationship with social background variables.

Finally the sixth chapter summarizes the findings of the study and presents the broad conclusions drawn on the basis of these findings.
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