

HEALTH PROBLEMS IN RURAL PUNJAB- STATUS, CAUSES AND CONSEQUENCES

Dissertation

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for the degree of**

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in

SOCIOLOGY

(Minor Subject : Extension Education)

By

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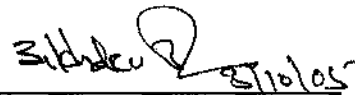
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The assistance and help received during the course of investigation have been fully acknowledged.



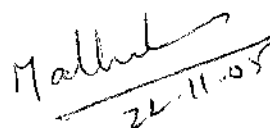
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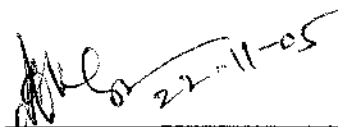
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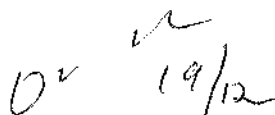
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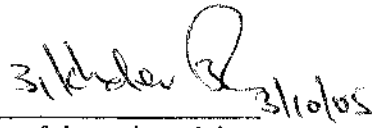
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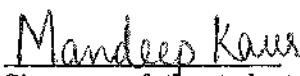
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ABSTRACT

To study the health problems, its causes and implications present study was undertaken with the following specific objectives : (i) to study the prevalence of diseases in rural areas and facilities available thereof; (ii) to study the contributions of various factors leading to rural health care problems; (iii) to study the correlation among social factors and health aspects and (iv) to bring forth the socio-economic implications of health problems. Primary data were collected from twelve villages of three districts representing the state. The study revealed that majority of the respondents were above forty years of age, hailed from Sikh religion, belonged to the high caste group, were living in nuclear families, having *pucca* houses and engaged in farming as their main occupation. Little more than half of the respondents were males. The majority of the respondents had family size of five to seven members. Nearly one-fourth of the respondents were landless and seventy per cent of them had total annual income below Rs. 120000 per annum. Almost eighty per cent of the respondents had spent below Rs. 10000 on health care. About one-third of the respondents suffered from anaemia and hypertension while the other diseases were eye problems, reproductive health problems, diabetes, joint pain, skin disease etc. Further, more than sixty per cent of the respondents told that three or more members in their family had suffered from various health problems. Three-fourth of the respondents told that they did not go for regular health check-up due to varied reasons. Majority of the respondents visited the government dispensary or subsidiary health centre at village level along with private health institutions like chemist shop and *dera* or *mazar*. The reasons for treatment from public health institutions mainly included availability of free facility and low cost treatment while in case of private health institutions it was lack of facilities in public health institutions. The respondents told that they did not get proper treatment in government established health centre at village level so they had to go to health centre at block level. Almost forty per cent of respondents told that health staff from block level visited them only once a month. Though the respondents were having medium level of housing facility yet the houses were surrounded by stagnant water. The respondents disposed off garbage in common garbage disposal area and kept animals within the residential area. Almost forty three per cent of the respondents told that they went to *babas* for cure of diseases who gave them varied treatments. In majority of the villages there were six to eight unqualified doctors or quacks. The respondents also followed certain home remedies in case of disease or illness. A significant positive relationship emerged between age and education of respondents and regular health check-up. There was a negative association between education level of respondents and whether going to *babas* have cured them from diseases and taking of medicines from unqualified doctors or quacks. The health problems generated lot of socio-economic and psychological consequences resulting in hardships to meet the daily needs, decrease of participation in community life, deterioration of interpersonal relationships. The family members also faced various problems due to the ill-health of the respondents. The people were found to be more disease prone during months of June-August due to harsh weather conditions supplemented by the negative impact of weedicides and pesticides used in the fields during these months. The study indicated that the government run medical institutions severely lacked basic health facilities and the staff. Keeping in view the overall scenario of the health institutions it seems imperative to rejuvenate the health system enabling the people to lead a healthy life which may result in more smooth and development oriented life.

Key Words : health, health personnel, health problems, public health institutions, private health institutions, diseases, quacks


 Signature of the major advisor


 Signature of the student

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ABBREVIATIONS

AIDS	-	Acquired Immuno Deficiency Syndrome
ANM	-	Auxiliary Nurse Midwife
ARI	-	Acute Respiratory Infections
CHC	-	Community Health Centre
ENT	-	Ear, Nose and Throat
LPG	-	Liquified Petroleum Gas
MD	-	Doctor of Medicine
MPHW	-	Multipurpose Health Worker
NGO	-	Non-Governmental Organisations
PHC	-	Primary Health Centre
SHC	-	Subsidiary Health Centre

INTRODUCTION

Every society and culture has laid stress on the health of its citizens. Health is cherished as a highly valued resource and a goal that every human being aspires for in order to perform his or her role effectively in the society (Kopparty 1991, Punia and Chhikara 1999). Health is rather an important component of social and economic development of a country as it is an essential input for the development of human resources and the quality of life. Health is regarded as a priority for sustained development at the individual, community and national levels (Srinivasan and Durgaprasad 1991).

The historical accounts vividly show the importance of health as a prized possession down the ages. The hygienic arrangements found in the ruins of Mohenjodaro and Harappa probably tell about the concern for health during that period. Later on during the Aryan rule the Vedas were a rich source of knowledge about medicine and healthy living. The *Atharvaveda* contains the first written references of medical ideas and medical practice in India and gave an insight into healthful living. In *Rigveda*, there is special mention of sages acquainted with medicine and versed in rational medical practice. In Vedas, the idea of sin as a cause of disease emerges distinctly, so for healthy living these stressed upon prayers

to gods. The Vedic period was succeeded around the beginning of the ninth century BC by the Brahminical period which is marked by the peak of development of Indian medical science. To this period belong the two greatest doctors *Charaka* who wrote *Charaka Samhita* and *Susruta* who wrote *Susruta Samhita* which formed the groundwork for the subsequent systems of Indian medicine. An extremely important part was played by the strict hygiene rules of the Brahmin religion with great emphasis on cleanliness for proper health. The ancient rulers like Chandragupta Maurya and Ashoka were great proponents of health and hygiene as they encouraged sports, athletic games, arts and sciences for healthy living (Thorwald 1962, Margotta 1968).

After the Brahminical period Mughals conquered India in seventh century AD which introduced Arab medicine in India. The Mughal rulers too were conscious about health and undertook activities for healthy living. *Hikmat* was established in India during the centuries of Muslim rule (Graziani 1980). The first allopathic doctors came from the West accompanying the Christian missionaries in sixteenth century and there was regular employment of doctors who along with the modern system relied upon indigenous systems of medicine for advice and treatment. In the British rule too health was given utmost importance and there was establishment of Medical Council of India. Before independence the Government of India set up a Health Survey and Development Committee in 1943 known as Bhole

Committee for the strengthening of health system. The Five-year plans too included outlay on health care and medical education thus realising the need and importance of health of its population (Mukhopadhyaya 1974, Madan 1980, Nayar 2004).

In India, five systems of medicine, i.e., Allopathy, Ayurveda, Homeopathy, *Yunani* and *Siddha* are prevalent. The government is emphasising on the importance of combining the elements of traditional and modern systems of medicine (Kakra and Bhati 1996, Economic Survey 2005). Along with these a belief system is running parallel to these systems of medicine. Superstitions and taboos are still in vogue in our country and these are harmful and dangerous as they result in delay in seeking proper medical care and increased morbidity (Sharma *et al* 1993, Pokarna 1994, Patel and Capoor 1996, Rajkumar and Balasundaram 1997).

Health, according to the constitution of the World Health Organisation (1949) is a state of complete physical, mental and social well-being and not merely absence of disease (Punia and Chhikara 1999, Srinivasan 2002, Sudharani *et al* 2003). Health may be thought of as the extent of an individual's continuing physical, emotional, mental and social ability to cope with his environment (Encyclopaedia Britannica 1974). Health biologically is a state in which every cell and every organ is functioning at optimum capacity, and in perfect harmony with the rest of the body; psychologically it is a state in which the individual feels a sense of

perfect well-being and of mastery over his environment; and socially as a state in which the individual's capacities for participation in the social system are optimal (Gaitonde 2005).

In India more than 70 per cent of the population lives in rural areas and state of health of this vast section of population may effect the overall development of the country and thus rural health needs to be the focus of the state policy. As a rule village provides a better ambience than the city for healthy living - the unhurried rural life lived in close contact and harmony with nature is far more conducive to good health than the highly artificial and hurried life of the city (Charles 1988, Anu and Singal 1995). Nevertheless, the state of health of urban population is better than that of the rural people mainly because of their poor and low standard of living, ignorance, traditional beliefs, unfavourable attitude which adversely effects their health and other conditions.

The provision of basic health care services to rural community is the primary objective of the government as well as non-governmental organisations in the context of rural development (Srinivasan 2002, Sudharani *et al* 2003, Punia and Chhikara 1999, Charles 1988). Keeping this in mind the Primary Health Centres (PHC) were set up in 1952 to provide preventive, promotive and curative services to the population in an integrated form. Over the years, there has also been considerable expansion of the network of health services in the rural areas. India is committed to

having a male and a female multipurpose worker in a sub-centre for every 5000 population and a Mini Primary Health Centre (PHC) for 30000 and a block health centre for 100000 population. The decision was taken in 1997 by the government to have a community health worker for every one thousand persons in the rural areas-chosen by the people themselves, with the objective of entrusting people's health in people's hands (Banerji 1989, Bharadwaj 1997, Kalia 1998, Nanda 2002, Srinivasan 2002). The statistics pertaining to the health also show an encouraging picture regarding the spread of health facilities and the availability of health personnel but due to the increasing population these facilities are still inadequate.

Time trends (1951-2003) in health care in India

	1951	1981	2003
SHC/PHC	725	57,363	1,63,196
Dispensaries and hospitals	9,209	23,555	38,031
Beds (Private and Public)	1,17,198	5,69,495	9,14,543
Nursing Personnel	18,054	1,43,887	8,36,000
Doctors (Modern System)	61,800	2,68,700	6,25,131
Malaria (Cases in million)	75	2.7	0.91
Leprosy (Cases/10,000 population)	38.1	57.3	2.4

Source : Economic Survey, Government of India, 2005.

Health has become an important problem for the country as a whole due to varied reasons. The health set-up is on a rather weak footing due to availability of doctors and paramedical staff being skewed in favour

of urban areas. There is widespread/large-scale absenteeism of these health personnel in medical institutions during the stipulated duty hours specially in rural areas. Astonishingly, the sub-centres are manned only by one or two Multipurpose Health Workers and there is no doctor in most of these centres indicating the shortage of doctors and health workers. There is wide-spread non-availability of essential and basic medicines, first aid material and laboratory testing facility. These public health institutions in rural areas are primarily consultation clinics where the doctor merely would write the prescription and not pass over the medicine except for certain basic medicines which are generally outdated or not of good quality (Srinivasan and Durgaprasad 1991, Bharadwaj 1997, Gill and Ghuman 2000, Sharma 2005).

As regards the physical infrastructure it is not only inadequate but also substandard. Almost all the rural dispensaries and sub-centres are without proper buildings. They also lack proper arrangement of water supply, electricity and sanitation. There is unsatisfactory supply and maintenance of sophisticated diagnostic equipment and other modern medical facilities. This has encouraged mushrooming of private clinics and hospitals in rural and semi-urban areas. The medical expenses charged from the patients in these clinics and hospitals are beyond the reach of the common man (Srinivasan 1987, Ray 1989, Pettigrew 1989, Nanda 2002, Narayana 2003, Sarkar 2004).

The inadequacies of the government health set-up are being filled by mushrooming growth of quacks who are doing great harm to the health of the rural people, especially the underprivileged. In India, quacks treat 75 to 80 per cent of the population despite over six lakh doctors of modern system and an equal number in Indian systems of medicine (Sharma 2005). The quacks charge exorbitantly high price for sub-standard treatment and medicines. These quacks operate because most doctors are reluctant to work in rural areas. Most quacks generally prescribe basic drugs and at times steroids (Srinivasan 1987, Gill and Ghuman 2000, Mahajan 2004).

Among the said three basic needs of food, shelter and clothing adequate and proper housing is an acute problem for the majority of population. In the rural areas of India there are 30.59 per cent *pucca* houses, 35.65 per cent semi-*pucca* houses and 33.76 per cent *katcha* houses which in true sense should not be called as "house" (Kumar and Venkataramana 2000). These houses are built with mud-walls, roof covered mostly with straw and leaves supported by bamboo poles. They are known for poor sanitation. In Punjab, though 72.14 per cent of the houses are *pucca*, yet in many parts of the state both human beings and cattle live together in the same "house". This unhygienic cohabitation is the root cause for several diseases (Hirway 1987, Singal and Srinivasan 1996, Rao 1997).

Safe drinking water and proper sanitation have greater impact on national human development and public health than any other single type

of intervention as they are vital human needs for health and efficiency. In rural India about 55.54 per cent of the households are having access to safe drinking water (Kumar and Venkataramana 2000). For want of safe water people are bound to suffer from various kinds of stomach related diseases like cholera, diarrhoea, dysentery, typhoid, fluorosis, jaundice because of dependence of general population on contaminated water (Swaminadhan 1995, Singh 2000, Chand 2004, Sezhiyan 2004, Mittal 2005). The people in rural areas face higher risks to their health and nutritional status for want of better sanitation and hygiene practices. About 80 per cent of the diseases prevalent in rural India are attributed to lack of safe drinking water and poor sanitation facilities and practices. Majority of people in rural areas are unaware of clean and healthy life and good sanitation for themselves. The most depressing feature of rural areas is their ability to ignore surrounding filth and unhygienic conditions thus deteriorating the sanitation situation of the household not because they cannot afford, a good many of them can but just donot bother (Anu and Singal 1995, Mehta *et al* 1997, Ponnuraj 2002).

The rural people because of their widespread illiteracy and simplicity still believe in evil spirit and magic and adopt '*Jadoo Tona*' for the treatment of certain diseases and ailments. The habits, customs, traditions, beliefs, values and attitudes are the main factors that govern human health practices in any community. Governed by the cultural beliefs and values people in rural areas are still practising home remedies for curing

certain ailments. For the diagnosis and treatment of diseases people consult traditional practitioners (Chaudhuri 1989, Pettigrew 1989, Bhatt 1994, Kakra and Bhati 1996). The people have immense belief in the role of religion or religious power in the cure of diseases. They believe that to some extent sickness or disease occurs as a result of *pap* (sins) of previous lives. The degree of sickness or disease depends upon the extent of sinfulness. The people strongly believe that 'little can be done by themselves to restore health', and, hence accord higher priority to religious ceremonies and practices that purport to maintain harmony between themselves and their supernatural world to prevent illness and diseases (Prasad 1989, Ray 1989, Pokarna 1994, Punia and Chhikara 1999).

The fast multiplying population of the country which has crossed the one billion mark in 2000 is also a major reason for scarcity of available resources and thereby creating widespread problems. In the health sector too the fast increasing population is leading to stress on available health facilities in the country as well as spread of diseases in the form of epidemics thus deteriorating the health status of the population. The widespread increase in population is creating problems like inadequacy of housing, sanitation, food insecurity, lack of safe drinking water for the population. Due to this, the problem of unemployment is also increasing at rapid pace thereby undermining the economic efficiency of population to ensure proper health care for themselves (Singh and Choudhary 1994,

Dhaliwal and Kler 1995, Kumar and Venkataramana 2000 , Sadhana and Baru 2000). Poverty and high cost of treatment together constitute another very marked reason for not seeking medical care by the population (Banerji 1989, Narayana 1989, Patel and Capoor 1996, Patel and Khan 1996, Gill and Ghuman 2000 and Thasian 2001).

There are certain socio-economic implications of the health problems of the rural people. These health problems adversely effect the economic efficiency as well the family income specially when the breadwinner of the family is suffering from serious illness. The expenditure incurred on treatment, medicines, travel and special diet is an added burden on the family economy. The bad health becomes the root cause of their economic dependency and helplessness. The prevalence of diseases and ill-health on a large proportion would not only adversely effect the productivity of the nation on one hand but also less of earnings to the family on the other hand would sometimes deprive its members of the essential items such as food, medicine etc. (Mahajan 1986, Kopparty 1991).

In case of illness or disease there is wastage of productive working days. This is specially an acute problem in case of poorer sections of the population as it leads to absence from work and consequent loss of wages thereby creating serious economic problems for the individual and the family as a whole (Kopparty 1991, Kaur 1998, Sharma *et al* 2001).

The interpersonal relations with family are also sometimes

adversely effected due to health problems. There is increased burden on the family to take care of person suffering from disease which sometimes leads to irritability and tension in the family. The person suffering from health problem needs the constant support, tolerance and acceptance from family members to ensure better response to treatment. A negative attitude of family could ruin the life of the patient making his condition deplorable while the positive attitude would provide some comfort and solace to the person. The family can help the individual to cope with the disease or health problem in an effective way (Ghai 1991, Acharya and Bhate 2005).

The poor health of the individual also leads to decreased functional capacity further, leading to decreased social participation. The health and illness affect the individual's performance of basic personal tasks of daily living and his expected roles because performance of social roles in economic, kinship and community organisations require individuals who can function competently. This impairment and disability increases the probability of failure in carrying out tasks and social roles thereby effecting their social status (Ghai 1991, Vlassoff *et al* 1996, Banerjee *et al* 2004)).

The health problems also have adverse effect on the physical and psychological well-being of the person suffering from it. There is inefficiency in work, tiredness, restlessness on part of the individual. The person suffers from frustration, depression, mental tension and anxiety due to health problems. There is also lack of interest in interacting with people

and the tension in the family has adverse effect on the individual himself. This certainly has an adverse effect on social and economic well-being of the family and the social system, as the work efficiency of the population depends on its health status (Mehta and Singh 1990, Rajan and Sarchandraraj 2004).

The growth performance of Punjab has been impressive since the mid-1960's, making it most advanced among the major states of India. The success of Punjab in economic development has been largely based on enterprising and adventurous nature of Punjabis who are known for their sturdy nature. Health has been given extreme importance by the people of Punjab as well as in the Sikh scriptures but due to increasing population, subdivision of landholdings, widespread unemployment, excessive use of weedicides and insecticides, health both physical and mental of the population, in this prosperous state is also on a weak footing (Grewal *et al* 1990, Nanda 2002).

Clearly, Punjab's achievements in economic growth have not brought a corresponding improvement in physical quality of life of the rural people. The rural areas continue to face the onslaught of traditional disease pattern as well as the whole range of new diseases associated with modernisation of society like heart attack, cancer, hypertension, aids etc. Unfortunately, the state government contrary to the national and international commitments for health care for all by the year 2000, has

adopted an attitude of withdrawal in matter of health care. Since 1992, there has been no expansion of medical institutions in urban as well as rural areas of the state, except for the reorganisation of the state health department by establishing the Punjab Health Systems Corporation (PHSC) which is entrusted with the task of secondary health care in rural and urban areas of the state. The rural hospitals and dispensaries in the state continue to be starved of essential medicines, cotton, first aid material, test facilities etc. and are primarily consultation clinics. Emergency and hospitalisation services are almost non-existent in the government run health system in rural areas of the state. So the rural areas of the state require special attention in terms of provision of proper health care facilities to its population (Pettigrew 1989, Gill and Ghuman 2000 and Sharma and Parthi 2004).

Keeping the above facts into mind and understanding the effect of health problems on development specially in Punjab where health is not in a good position due to varied factors, so to understand the ground level reality regarding health problems it was thought imperative to conduct a study in the rural areas of Punjab to have a closer look at the present status of health along with the causes and consequences of health problems on the population with the following specific objectives :

1. To study the prevalence of diseases in rural areas and facilities available thereof.
2. To study the contributions of various factors leading to rural health

care problems.

3. To study the correlation among social factors and health aspects.
4. To bring forth the socio-economic implications of health problems.

Theoretical background

The interest of sociologists and anthropologists in the field of medicine is rather new. The sociology of medicine has a relatively short history as the emergence of medical sociology as an organised discipline occurred in the years after second world war, i.e., in the late 1950s. The prominent figures included Talcott Parsons, Evert Hughes, Robert Merton and August Hollinghead. Parson's work on medicine as a social institution and illness as a deviance, was an illustration of a larger theory of society. Parsons (1951) was the first one to view illness as deviance and to postulate the concept of sick role. Illness can be viewed as a deviant social state brought about by disruption of normal behaviour through disease. The functionalist approach to deviance through the concept of Parson's "sick role" views sickness as a disturbance in the "normal" condition of the human being, both biologically and socially. Parsons postulated that being sick is not just experiencing the physical condition of sick person, rather it constitutes the non-performance of social roles according to the norms of society. A major expectation relates to inability of the sick to take care of himself and consequent need to seek medical help and co-operate with the medical practitioner to get well. Merton used medicine as an example of a

profession in the study of professions. Hughe's work was done within the framework of occupational sociology and health of workers engaged in various occupations. Hollinghead's main focus was on distinction between health behaviour of various social classes and their perception about good health.

The development of Medical Sociology in Post-Independence India involved applying sociological theory and research to the solution of medical problems as sociologists and social anthropologists for the first time were involved in the public health programmes during the fifties by the Government of India. The work was done by the social scientists in fields like hospitals as an organisation, studies on interpersonal relations in hospitals amongst doctors, nurses and patients, studies on medical profession and studies on medicine, health and community by sociologists like Srivastava, Aggarwal and Advani, Madan, Oommen, Ramanamma and Bambawale, Nangla, Sharma, Srinivas, Das and Majumdar, Bhatnagar, Bhardwaj etc. who have contributed for the formation of medical sociology in one way or the other.

Significance of the study

Health is one of the prime possession of an individual as it is rightly said that a healthy mind always resides in a healthy body. Health determines not only an individual's productivity but the sustained development of the country as well as the society. The rural areas though

having a conducive environment for healthy living still suffer from health problems due to ignorance, traditional beliefs or unfavourable attitude. The health set-up is on a rather weak footing specially in rural areas due to unavailability of doctors and paramedical staff along with non-availability of essential and basic medicines, physical infrastructure, laboratory testing facilities, diagnostic equipment. Along with this reasons like mushrooming growth of quacks, poor housing facilities, lack of safe drinking water and sanitation facilities, belief in magic and religious power, malnutrition, widespread poverty are responsible for the rural health care problems. The result is decreased economic efficiency of the individual as well as the society, absence from work, deterioration of interpersonal relationships, frustration, depression, family discords due to health problems. The health problems thus do have effect on the economic and social life of the population thus the indifferent attitude of population towards health specially in rural areas needs to be changed as the work efficiency and the progress of the country depends on its population. Thus, the significance of the study is to know the present status of the health, prevalence of various diseases and consequences of health problems. Ground level feed back on the issue may be helpful to ponder upon and make necessary modifications in the planning mechanism.

Limitations of the study

There will hardly be any study in the area of social sciences which may be free from limitations. The present study is based on primary data and the results may be applicable to a wider area yet it is not possible in all the cases. The present study bears the followings limitations :

1. This study has been conducted in three districts of Punjab namely Ludhiana, Amritsar and Bathinda and the results may vary with regard to other parts of the state as well as in case of other states of the country.
2. The findings of the study are based on the expressed opinions of the respondents suffering from health problems in rural areas. In spite of all efforts made to get accurate information from the respondents, the possibility of subjectivity or biased information could not be completely ruled out.
3. This study being the work of an individual student has its usual limitations of time and resources.

Chapter- II

REVIEW OF LITERATURE

Any research is planned and executed on the basis of what has already been accomplished in a particular sphere and related areas of study. Keeping this in view, an effort has been made by the investigator in this chapter to get acquaintance with the available literature having a direct or indirect bearing on the present research study from various available sources. For the sake of convenience the review has been classified into 4 parts and discussed under the following headings :

2.1 Prevalence of diseases in rural areas and facilities available

2.2 Factors contributing to rural health problems

2.3 Correlation among social factors and health aspects

2.4 Socio-economic implications of health problems

2.1 PREVALENCE OF DISEASES IN RURAL AREAS AND FACILITIES AVAILABLE

Ramalingaswami (1986) undertook a study to understand the impact of government health programmes on women from economically weaker section with a sample consisting of 372 tribal women of 15-45 years age group living in Paderu Block of Visakhapatnam district in Andhra Pradesh. The study revealed that the services of the Auxiliary Nurse Midwife (ANM) had not reached these people although they were aware about them and nearly 29% said that they would have preferred to have an

Auxiliary Nurse Midwife (ANM) attend on them during childbirth. Almost 85 per cent respondents did not receive the tetanus toxoid injection which is part of the immunization programme of the government and which the Auxiliary Nurse Midwife (ANM) is supposed to give for reducing maternal mortality. As regards knowledge about diseases almost all respondents were aware about malaria and malaria worker whom they associated with fever tablets and blood smear. Although this area is an endemic area for leprosy and tuberculosis is also quite common only approximately 29% of the women could mention the important symptoms of these diseases and were aware of the possibilities of treatment.

Banerji (1989) conducted a study in the village Kachhona of Hardoi district of Uttar Pradesh to access the class inequalities and unequal access to health services by different sections. The study revealed that the village level functionary at the lowest level i.e. The Auxiliary Nurse Midwife (ANM) charges money for her services, she ignores the poorer sections and pays special attention key persons of ruling classes. The Auxiliary Nurse Midwife (ANM) gives special attention to rich households as she get a reward for her services, she gets better conditions to work in and through these influential people she can create good impression on her supervisors like Primary Health Centre (PHC) doctors and district officials who visit these key persons to find out from them what the "Village Community" feels about the work of the Auxiliary Nurse Midwife (ANM)

and other health workers. The Harijan women interviewed told that they were discriminated against in terms of access to maternal and child health services which were supposed to be provided through the primary health centre located in the village itself by the health officials.

Pettigrew (1989) conducted a study on "Problems of Medical Prevention in a Punjab Village". The four most common diseases prevalent in the village were bronchitis or pneumonia, cardiovascular diseases, amoebiasis and tuberculosis of lungs and abdomen. In hot-wet season many children had septic sores on their legs and arms. Anaemia, diarrhoea and various respiratory diseases were prevalent and no noticeable preventive activity existed.

Mehta and Singh (1990) in their study revealed that the respondents mostly suffered from infectious diseases due to lack of knowledge about environment sanitation like malaria, diarrhoea, dysentery, eczema and ringworm. They also suffered from chronic diseases followed by psychiatric diseases, diseases of eyes, hair and mouth, common diseases, deficiency diseases, skin diseases and gynaecological disorders. About half of the respondents had some anxiety or tension due to which they suffered from headache, hypertension, low-blood pressure and hysteria, respectively. Their knowledge about the linkages of environmental sanitation and health disorders was distressingly very low.

Ghai (1991) undertook "A study of social, psychological,

economic and health problems of the aged in rural Punjab - A case study of Ludhiana district". As regards the health status of the elderly, almost half of the respondents i.e. 48 per cent had minor illnesses followed by the ones who perceived that they had good health. A very small percentage of the respondents i.e. 6 per cent were seriously ill or incapacitated. A majority of rural aged suffered from hypertension, heart problems, rheumatism, weak eyesight and asthma. A large number of respondents (48%) were looked after by their family followed by their spouses (39%) during illness. Almost half of the respondents required no treatment and 35 per cent had to spend upto Rs. 100 on medicines. Mostly the respondents were satisfied with the care and treatment provided by hospitals.

Patowary *et al* (1995) conducted a study on iodine deficiency disorders in Dibrugarh district of Assam. It was found that nearly 40% of the respondents were suffering from goitre and most of the respondents used salt having inadequate iodine contents. The storage facilities at household level effected the quality of salt as it was mostly stored in earthenware pots from which iodine content was rapidly reduced to around one-fourth within a month and half. The knowledge and awareness regarding iodine deficiency disorders and availability of iodised salt was poor and more than 80 per cent of women of reproductive age group were not aware that goitre was a health problem.

Patel and Capoor (1996) both as members of a voluntary

organisation 'CHETNA' in their survey of 200 women in Gujarat through house to house visits found that the common illnesses the women complained of were vaginal discharge, weakness, backache, giddiness, fever, headache, excessive bleeding, skin infection. Out of these 40 women mentioned certain gynaecological and obstetrical complaints like vaginitis, cervicitis, pregnancy + vaginal discharge, endocervicitis, trichomonal infection, pregnancy and anaemia, pregnancy with hypertension, premature menopause, primary infertility, menorrhagia, itching in genitals etc.

Patel and Khan (1996) conducted a study on "Reproductive health problems of women in rural Uttar Pradesh" to understand the reproductive health problems of women in rural areas of Agra district. Almost 77 per cent of the married women in their reproductive age reported atleast one symptom indicating reproductive health problem. Only 46 per cent of them had taken treatment or consulted a health provider at Primary Health Centre (PHC) or sub-centre level, mostly they had relied upon private medical practitioners. Majority of the Auxillary Nurse Midwives (ANMs) reported that women contact them with problems of white discharge, menstrual cycle, infertility, prolapse, abortion etc. Majority of the Auxillary Nurse Midwives (ANM's) (70.00%) are not in a position to provide any help or prescribe some medicines to the women suffering from reproductive health problems thus referring them to Primary Health Centre (PHC), private doctors and hospitals. Poverty and high cost of treatment together constitute

the major reasons for not seeking medical care in case of health problem.

Sharma (1996) conducted a study on channels of health communication in rural areas of Varanasi district of Uttar Pradesh. Except for general medical care, immunization, family planning and care of pregnant mother's the outreach of Primary Health Centre (PHC) services was quite poor. As regards the information, education and communication activities carried out by Primary Health Centre (PHC) during one year group meeting accounted for 80% of all activities followed by health exhibition and slogan writing. The other health education activities like film shows, orientation training camps, puppet shows etc. were less than one activity per month. The activities were not sufficient enough to cover the entire village and create impact on the knowledge gain and adoption level of the villagers due to infrequency and inadequacy of the use of communication channels for dissemination of health information.

Rajkumar and Balasundaram (1997) conducted a study on the incidence and prevalence of communicable diseases among the Paliyan tribe inhabiting the Dindigul-Anna district of Tamil Nadu comprising a sample of 290 respondents. The study revealed that twenty four per cent of the respondents suffered from sexually transmitted diseases, the incidence being higher in men. It was found that almost half of the respondents suffered from tuberculosis due to general malnutrition and personal and community hygienic conditions. It was observed that about 46% of the tribal population

was affected by diarrhoea twice in a month because of their ignorance and dearth of awareness towards appropriate treatment and hygiene. These tribal settlements were not provided with proper toilets and bathrooms, hence they became host for diarrhoea and worm infection. Measles had spread in only one tribal village while typhoid and influenza were very common in these areas. Almost half of the respondents utilised modern medicines but 52% to 72% of the affected people did not complete the full course of treatment. It was surprising to note that about 90% of the tribal population irrespective of the age group and sex were affected by anaemia.

Sundar *et al* (1997) conducted a cross sectional study in Gollahally, Primary Health Centre (PHC) area of Bangalore district to understand the intersectoral co-ordination among the education and health staff. Nearly half of the teachers and health staff were aware of the intersectoral co-ordination among health and education departments at Primary Health Centre (PHC) level. It was found that 45% of the teachers were educated by health staff on topics like cleanliness at school, recreational facilities, personal hygiene, clean environment and their impact on health. A few teachers and health staff attended regular Primary Health Centre (PHC) school monthly meetings on their own interest due to reasons cited as lack of communication, too much of regular workload and beyond their immediate responsibilities. Even those who attended the meetings were not adequately aware of the health issues indicating lack of commitment and

dedication on the part of medical officer of the Primary Health Centre (PHC).

Mavalankar and Patel (1998) in their project on primary health care in the Saberkantha and Ahmedabad districts of Gujarat tried to observe and evaluate the functioning of district health organisation where Primary Health Centres (PHCs) are under the Panchayats. Due to inadequacy of funds there were complications involving their use for the purchase of materials like medical equipment, drugs, furniture and so on. Local health committees constituted to facilitate the delivery and monitoring of health services at the village level, either do not exist, or if they do, are mostly inactive. Mostly the staff is absent from the Primary Health Centre (PHC) and the panchayat has not been able to address the issue of either the work culture or access and availability of Primary Health Centre (PHC) services. Doctors are irregular and not easily accessible as they do not stay in the proximity of the Primary Health Centres (PHCs) to which they are attached. The duties of Male Health Workers are supposed to include the promotion of environmental hygiene, clean water supply and sanitation. Unfortunately, these basic functions had been neglected - especially sanitation promotion.

Babu *et al* (2000) in their study of 12 villages in four blocks of Khurda district in Orissa found that only a small proportion of scheduled castes respondents said that the health workers visited their part of the village regularly with a great majority (87.00%) feeling that the health

workers visited them only once in a while. More than 60 per cent of the respondents perceived that services of government health workers were not satisfactory. Majority of the respondents had visited their nearest health facility more than a month ago, either for themselves or for their family members. The various types of problems in the government health facilities were non-availability of medicines and basic laboratory facilities, absence of staff at the facility, too much waiting period or long distance of government health facility. The study revealed that discrimination based on caste lines, though not severe, exists in the study areas as the health workers rarely visited the houses of scheduled castes and if they visited they asked about their health problems without entering their houses.

Acharya *et al* (2003) conducted a study in village Malpe of Udupi district of Karnataka to investigate the acute respiratory infections in children with a sample of 107 children. The overall incidence of Acute Respiratory Infections (ARI) was 6.42 episodes per child per year while each episode lasted for 5.06 days. The mean duration of Acute Respiratory Infections (ARI) during one year was 32.5 days per child. Almost 90 per cent of respondents had upper respiratory infection while almost 8 per cent had lower respiratory tract infection with pneumonia. Annual incidence of Acute Respiratory Infections (ARI) was found to be significantly higher among children who were not properly breastfed and those living in poor housing conditions with indoor air pollution due to use of biomass as fuel

and lack of ventilation, overcrowding and effect of passive smoking.

Ganguli (2003) in his study of 230 adolescents in a rural area of village Indori from Pune tried to assess the personal hygiene of boys and girls through a scoring system including habit of taking regular bath, trimming of nails, cleaning of hair, washing hands before meals, cleanliness of clothes or footwear, prevention of lice and skin diseases. One boy and six girls showed poor grading and in all boys had very good personal hygiene as compared to girls. On routine examination the problems noticed were wax in ear, tonsillitis, pallor, dental caries, skin infection and nasal polyps. Nearly 30% boys and 20% girls were aware of some diseases spread through sexual intercourse, out of which Acquired Immuno Deficiency Syndrome (AIDS) was found to be most commonly known disease.

Banerjee *et al* (2004) conducted a study of 100 hamlets of 362 villages of Udaipur district. The study revealed that 51 per cent of men are anaemic while 56 per cent of women suffered from anaemia in the sample population. In the study one-third of the respondents each reported cold symptoms and fever, 42 per cent reported 'bodyache', 23 per cent upper abdominal pain, 11 per cent had chest pains and 11 per cent had experienced weight loss. They tend to visit the public health facility on an average 0.51 times a month while majority of the rest of visits are to private facilities and the '*bhopas*' who are traditional healers. On an average 45 per cent of the health personnel are absent in subcentres and aid posts and 16 per cent are

absent in the larger Primary Health Centres (PHCs) and Community Health Centres (CHCs). The subcentres are closed 56 per cent of the time during regular opening hours. The laboratory testing facilities were also inadequate or generally absent and the medicines were supplied free of cost as long as they were available. Almost 41 per cent of the respondents were found to be getting service of private practitioner.

Khan (2004) stated that the health system is facing the problems of extensive absenteeism of health care providers, there is lack of concern for poor people, deteriorating financial constraints, untimely release of salary of officials thus affecting their morale, politicisation of development activities, growing burden of job responsibility, shortage of health workers, poor supply of drugs and non- residence of staff at health centre. Health personnel generally approach the panchayat as and when they need any physical support in carrying out any health activity at the level of community such as eye camps, family planning camps, immunisation camps etc. They do not approach the panchayat members as partners and recognise them as supporters because if there is effective partnership between health department and panchayats, change could be effected.

Nayar (2004) stated that the community health guides/volunteers who are entrusted with the task of providing health services have failed to do so due to several reasons like the selection process which is a means to distribute political patronage as the close relatives of panchayat leaders were selected as community health workers. The training is extremely limited and in course of time

these appointed persons became quacks. The accessibility and availability of healthcare is undermined by the institutional inadequacies in the public health system which is influenced by various social, political and economic factors. There is incompleteness in the availability of necessary services at the government health centres being the main reason for the under utilisation by the people. There is utter neglect of primary health care and primary health care institutions by the government.

Rajan and Sarchandraraj (2004) undertook a study of 120 old aged persons in Pondicherry. The study probed various problems of the aged including their health problems. The major health problems of the aged included defective eye sight, general weakness, pain in joints, cough and cold, defective hearing, blood pressure, digestive complaints, breathing trouble, trembling of limbs, loss of weight, losing teeth, no sleep and loss of memory. These respondents told they donot have enough money for medicine, proper diet and are neglected by their family during ill-health.

Sarkar (2004) found that doctors in government service are most reluctant to go to rural areas. If they are posted there, they come to their rural hospital or health centre for brief, flashing moments after which they go off for their private practice in villages or small towns. Compared to the affordability of the homes their visiting fees are not low. In a rural hospital of Midnapur district of West Bengal there was not even a single resident patient. People didn't trust the hospital and its services well-enough

to enrol. The operation theatre was hardly used at all and had the most elementary facilities. Medicine supply was sparse and electricity supply in rural area was intermittent and unreliable. In case of a badly ill patient had to be moved to the district headquarters hospital there was no transport.

Sharma and Parthi (2004) undertook a study in Patiala and Rupnagar districts of Punjab by covering 25 primary health centres in each district out of which two multipurpose health workers each were selected along with selection of 500 households each from the two districts. The female multipurpose health worker visited the 60 per cent of the respondents suffering from reproductive health problems. There was widespread preference for home deliveries among the pregnant women and private nursing homes were fast gaining popularity over time due to personal attention given, availability of doctors round the clock and affordability. The respondents preferred to take the help of trained midwife at home instead of going to hospitals either public or private due to resistance from elders and financial costs involved. The doctors seemed to play no role in assisting the women during home deliveries. The mother and the child were not allowed to move out of the house to undergo regular health checkup for the fear of infection and evil eye so their health problems were not properly communicated to the health staff and thus remain undiagnosed and untreated.

2.2 FACTORS CONTRIBUTING TO RURAL HEALTH PROBLEMS

Adhikari (1989) undertook a study on poor delivery of piped water schemes. The study covered about 40 villages from eight hill districts

covering a sample of 844 households and revealed that on an average, about 83 per cent households covered under drinking water supply schemes still use old sources of water like springs, ponds, rivulets and rivers etc. The sample households of Tehri Garhwal and Nainital had reported their utter dissatisfaction with the adequacy of piped water supply while about 60 per cent households expressed dissatisfaction each in Almora, Pauri Garhwal and Dehradun district. Majority of households reported poor or no maintenance of the drinking water supply as the main factor for rendering the rural water supply schemes non functional.

Prasad (1989) stated that owing both to the problems of a rapidly growing population and an erosion in the resource base and the quality health services, there appears a serious gap in the management of health care, notably in rural areas. Sickness in Indian villages, by and large, signifies moral as well as a physical crisis, involving human conduct and cosmic purpose e.g. those women suffering from physical weakness owing to anaemia etc. ought to be given strength restoring inputs like balanced diets coupled with iron and folic acid tablets and vitamins but the Hindu ritual cure prescribes a ritual pilgrimage that envisages ritual baths/holy dips in Ganges, Yamuna, Godavari etc. In villages of Andhra Pradesh, Gujarat and West Bengal ritual occupies a pride of place in being visualised as "medicine" for "healing the sick" like the worship of goddesses Mariamma, Mysamma, Chinna Ammavaru, Sitala abound. The taboos, prejudices,

beliefs and attitudes centering around food are also products of cultural practices that are in vogue. A major reason for the relatively low subscription of people to the concept of domestic or community hygiene and sanitation is said to be related to the cultural notions of people or social groups. However the pregnant or lactating women suffer more than men as they are more susceptible to catching air fly borne diseases due to unhygienic practices.

Ray (1989) conducted a study on "Health care in West Bengal villages". The study dealt with various aspects of health facilities, incidence of diseases and use of health care facilities by the people of two districts of West Bengal. Sanitary facilities were available with only 20 per cent of households. Bathing in polluted water ponds led to various types of diseases. Handpumps were the only source of drinking water and a limited number of households had private handpumps. The *Ojhas* were still playing an important role in treatment of various diseases.

Kaur (1990) revealed that a majority of the rural homemakers belonged to the age group of 30-40 years and majority of the homemakers in both the groups were illiterate. Average annual income of the non-farming families was low as compared to the farming families. The rural families had owned houses constructed over 15 years ago. As far as the type of house is concerned, most of farming families (70 per cent) possessed semi-*pucca* houses, whereas non-farming families (55 per cent) possessed *katcha* houses.

Constructional features of house in terms of roof, wall and floor were found to be *katcha* in non-farming families and farming families had *pucca* finishes. Separate store room was possessed by 55 per cent of farming and 26.60 per cent of non-farming families. She found that poor housing conditions were associated with certain diseases like malaria in that area.

Mehta and Singh (1990) undertook a study in village Bosti in Hisar district of Haryana. An attempt was made to know about knowledge, perception and attitudes of respondents in relation to various health problems. The study revealed that they are still in the midst of unhealthy traditions and are yet to catch-up with the new in medical services. Their belief in supernatural power still persists as a cause of disease followed by poor diet and poor environment. The respondents still mostly consulted *hakims*, *vaid*s and *sadhus* - *syanas* (quacks) for various health disorders. Most of those who believe in supernatural causes, prefer to seek magico-religious treatment.

Jathol (1991) undertook a study in two villages one being more advanced and another less advanced of district Hoshiarpur of Punjab. Most of the respondents kept the fertilizers in the same room in which they slept so the wrong storage of chemicals and fertiliser, led to breathing difficulties and other infections specially during rainy season due to smell of fertilizers. The use of agricultural machinery in the villages led to noise and dust pollution. Large number of people complained of breathing problems and irritation in the throat as a result of

threshing indicating that threshing was a major health hazard in the village. The streets in the villages were *katcha* leading to stagnation of water in rainy season which becomes a place for breeding of mosquitoes and foul smell. Most of the respondents lived in *katcha* houses with *katcha* floor which is responsible for more dust, rat problem and dampness. A considerable number of respondents kept their animals in their own living rooms which led to bad smell and breathing difficulties. The respondents mentioned that malaria was quite common alongwith typhoid and skin diseases as a result of polluted environment of the village as well as wrong practices followed by the villagers.

Bhardwaj *et al* (1993) in their study conducted in 10 randomly selected villages in Bamsan belt of Hamirpur district of Himachal Pradesh revealed that though most of the villages of the district were covered under drinking water supply but there was a regular failure of piped water supply in the state including this district. The local population had to thus depend upon traditional sources of water viz. wells, *bouris*, springs, ponds and *Khatris*. The water samples tested revealed the presence of bacteria and faecal coliform so they were chlorinated to make them safe for human consumption. The state came under the grip of dual epidemics viz. Typhoid Fever and Cholera. The local population were disappointed with erratic piped water supply inspite of government spending a lot on installation and maintenance a piping system in difficult areas.

Sharma *et al* (1993) undertook a study in village Kurandhi of

Bastar district in Madhya Pradesh by taking a sample of 356 inhabitants. The study revealed that 46 per cent of respondents were aware that malaria was caused due to mosquito bite while rest of them believed that the disease was caused due to wrath of God, witch craft, visiting forested area, drinking bad water. About 50 per cent of the respondents were aware about the signs and symptoms of the disease while the other half of the respondents informed that in the case of fever they prefer to take treatment from tribal quacks, practice witch craft, use wild herbs, used chilli or turmeric powder. The respondents informed that they used cowdung smoke to drive away the mosquitoes or use *Kuranji* oil as repellent to prevent the mosquito bites. The low socio-economic conditions of the tribals appear to be the main reason for not understanding measures like using mosquito bednets or any other type of repellent available in the market to prevent mosquito bite.

Bimla (1994) in an investigation carried out in some villages of Haryana tried to assess the housing quality and the health condition of children (2-15 years) to study the association of health and housing. The sample comprised of 70 nuclear households and found that more than one-third of houses were found to be satisfactory and only half of the houses had satisfactory sanitary facilities like sanitary excreta disposal, disposal of solid waste, drainage of water etc. Regarding the health condition of children, the majority of children (60.00%) had an unsatisfactory level of health conditions. The association between housing and health condition of

children was found to be statistically significant thus emphasising the importance of health advocacy for housing, as housing provision and use contribute to better health.

Pokarna (1994) conducted a study in Manchwa and Begas villages of Rajasthan. The study focussed upon the structural and cultural dimensions of health, disease and medical care as they exist and operate in rural areas. The study showed a significant association between the belief system and health practices. They believed that until and unless a person completely stops his day-to-day work and confines to bed, he is healthy. The villagers also believed that to some extent, sickness/disease occurs as a result of *pap* (sins) of previous lives. The sinful act not only brings illness upon him but also on the members of his family. Location of village and distance from the city played a significant role in the presence and absence of food fads. Respondents of village Begas strongly believed that combination of food may cause various diseases. The measures of therapy and preventions taken by the village community against various prevalent communicable and non-communicable diseases and nutrition disorders depended upon the prevailing cultural factors. For the diagnosis and treatment of disease people consult traditional practitioners. The selection of the source of treatment by the villagers is related with their belief system. Home medication and treatment at home was preferred by the villagers rather than getting admitted in the hospital. Socio-cultural barriers hinder

the process of treatment.

Anu and Singal (1995) conducted a study on "Availability and use of sanitary facilities in rural households of Haryana". Nearly half of the households, i.e., 52 per cent belonged to low socio-economic status. Majority of the households had separate bathroom facility (88.40%) and provision of electricity (81.80%) in the house. Less than one-fourth households had provision of *katcha* drains for waste-water disposal (23.60%) and separate cattleshed (20.00%). Nearly half of the respondents used community tap (48.33%) as source of drinking water. The study highlighted the absence of any measures being taken for safe and useful storage of drinking water, thus led to many water-borne diseases.

Kakra and Bhati (1996) in their study of a semi-urban locality of Delhi, namely Khizrabad conducted on a sample of 100 mothers concluded that most of the mothers still believed in superstitious practices for the treatment of most of the diseases affecting children. Superstitious beliefs were more prevalent in case of diptheria, poliomyelitis, whooping cough, tetanus, tuberculosis and measles. Magic effect and evil eye were the most common superstitious beliefs. Wrath of God/Godess in measles, magic effect in poliomyelitis, sour/fried food in whooping cough and diptheria were the most common superstitions. The various superstitious practices like worship of God, "*Jhar Foonk*", tying amulet/sacred thread and removal of evil eye were the most common as they were practised by the respondents in

almost every disease. A number of home remedies were also found prevalent among the respondents.

Kaur and Goyal (1996) conducted a study in four villages of the two districts of Haryana to see the extent of utilization of health facilities in the state. Data related to the attendance in village health centre was obtained for two months. In the age groups of 0-5 years and 5-15 years, attendance of females was very less as compared to males. In the higher age-groups, the percentage of females seeking treatment increased. There were differences in terms of type of medical treatment given to males and females. Percentage of households giving traditional or home remedies was highest in case of female children followed by female adults. Only 1.9 per cent of the male children and none of the adult males were treated at home or with traditional remedies. As regards taking the patient to nearby cities for treatment maximum percentage was of male adult and male child. The females in general and girl children in particular are not taking advantage of the health services available in the village as even where the health centre is near, women are not using it fully. Women in rural area, because of their household responsibilities and out of ignorance tend to neglect their illness until they become too sick to move around and attend to household chores.

Patel and Capoor (1996) in their study revealed that there were certain economic aspects like women not being able to afford to go to community hospital as it was far and they cannot afford to lose wages, they

prefer to go to private doctors as it saves time but since treatment is costly, it remains incomplete. The socio-cultural aspects like male member decides when and who needs treatment, as for him, women's health is of lowest priority and even women put her own health at lowest priority. The knowledge and beliefs of women also affected their health as due to inadequate knowledge of cause of illness, it becomes sometimes difficult to prevent it. Women also follow irrational beliefs and superstitions which make the disease serious.

Singal and Srinivasan (1996) undertook a study in villages of rural areas of Hisar district of Haryana with a sample of 120 women from nuclear families with majority of them living in semi-pucca house with two rooms and were cooking in smokeful environment. The respondents also lacked basic amenities like door to the kitchen, storage space, water supply, provision for the disposal of waste water and garbage and this situation was found leading towards the various diseases like asthma, cholera, typhoid etc.

Mehta *et al* (1997) in their study of four villages of Hisar district tried to assess the acceptability of sanitary latrines introduced in the farm families under an action oriented programme of the All India Co-ordinated Research Project. The study revealed that 37.50 per cent of the respondents showed high acceptability for sanitary latrine, closely followed 35.00 per cent having moderate acceptability. More than one-fourth of the respondents (27.50%) reported low acceptability and lesser use of sanitary

latrine because of the fear that pit will get filled up soon and the elders and male feel suffocated to use it. The majority (95.00%) reported that they were compelled to use the latrine because of the non-availability of open space for defecation near their village area. They also found it time saving (81.25%) and labour saving (51.25%) technology. About three-fourth (72.50%) of them adopted it because it protects the health by reducing the chances of contamination and promotes environmental sanitation. The constraints identified by the respondents were reported as economic (48.75%) as it involves lot of expenditure for construction followed by operational (26.25%), socio-cultural (25.00%) and situational constraints (16.25%) due to small house and fear of existence of foul smell in the house after its regular use.

Rajkumar and Balasundaram (1997) in their study found that people were used to drinking, washing and bathing in springs and streams and the treatment for the disease was sought from the magico-religious diety through the village priest. The tribals believed that village priest can heal a number of health problems like loss of appetite, reduction in weight, diarrhoea, cough, vomiting and fever since they were caused by evil spirits. Hence they visited the tribal priest (*Poosari*) in the local tribal area who offered holy ash or waved the bunch of neem leaves and chanted hymns to invoke the blessings of the local diety. He then declared that the disease had healed and prescribed certain taboos in diet. Their houses were very compact

and closed, did not have windows, provision for ventilation or smoke outlets. Fifty five per cent of the households had two meals a day while 12.4 took only one meal a day.

Kaur (1998) conducted a study on "Socio-economic conditions and rural housing of scheduled castes in Faridkot district of Punjab". She concluded that pattern of housing among rural scheduled castes is not a healthy indicator of community development. There was no proper disposal of waste water. The sanitary facilities in the houses were made only for very old and sick members of family. About 45 per cent respondents had no adequate water supply to their houses. Only a few houses had covered kitchens.

Mavalankar and Patel (1998) in their study found that most of villages in Gujarat still donot use toilets. The water chlorination is not done on a regular and scientific basis in most villages. Disposal of waste water and storage of clean water is also not done properly and stagnant water is a source of mosquito breeding. Solid waste management is poor too in every village, mounds of cowdung is dumped in the open providing ideal places for flies to breed. Panchayats donot have the resources or the political will to improve the water and sanitation situation which is a major constraint on the health scene in the state.

Punia and Chhikara (1999) in their study of Rohtak and Hisar districts of Haryana state revealed that the rural people still practice home

remedies for different ailments as compared to doctor's treatment. The respondents still believed in the exorcist (*Jadoo Tona*) as they took advice from the exorcist side by side when doctor's treatment was going on. Data regarding home remedies for different ailments revealed the use of *Jaiphal*, mango seeds, *Supari*, black tea, *ghee* etc. for dysentery. In case of ear infection mother's milk, mustard oil heated with garlic, warm onion juice was also used. Home remedies adopted for fever were use of *Jaiphal*, *Laung* and tea prepared by boiling *Tulsi*, *Harar* and Black *Illayachi*. They gave seasoned tea, rice and curd for treatment of diarrhoea. Though to some extent the home remedies are of help only for minor ailments but the doctors recommended that even the home remedies should be given under the consultation of a specialist and the treatment should not be delayed before the ailment becomes too serious.

Das and Visaria (2002) conducted a study of 684 households of 26 villages from Banaskantha and Palanpur districts of Gujarat. The study revealed that a large proportion of households reported washing of hands before cooking, eating and feeding children but only 26.9 per cent of the respondents reported using of soap for hand washing while the rest used ash, mud with water and water only. In case of 75 per cent of the respondents reported use of latrines by all members while in case of 15 per cent of households latrines were used only by adults. The members who did not use the latrines followed the conventional practice of going to the open fields.

Only a small proportion of respondents (12%) referred to the hygienic aspects of using the toilet while those who did not use latrines gave the reasons as high water requirement, difficult to maintain, open field is better etc. There was indiscriminate disposal and accumulation of waste and water cesspools in the streets and open grounds of the study area which not only pollute the environment but are also breeding grounds for many disease carriers. Nearly 85 per cent of the households disposed off solid waste either by dumping it in a pit within the house or on a common dumping ground or in a public garbage bin. The remaining chose to throw waste in the courtyard or had no systematic way of disposing it off. As regards disposal of children's excreta 28 per cent of the children defecated within the house while 40 per cent of them defecated in the courtyard. More than 95 per cent of the households reported that they cleaned their children immediately after defecation mostly with water only.

Mahajan (2004) found that in Nurpur subdivision of Kangra district as many as 100 quacks have set up their ill-equipped clinics mostly in the rural areas of this subdivision. They are luring the poor and illiterate patients with the false claims of treatment of deadly ailments. Some quacks are displaying signboards showing fake qualification of MD (doctor of medicine) but the authorities concerned fail to take any action against them for the reasons best known to them. The free club, a social organisation is up in arms against such quacks mushrooming unabatedly in the area.

Singh (2004) stated that a commonly stated reason for doing so poorly in promoting, protecting and restoring the health of the millions-particularly lower-middle and poorer sections is the lack of adequately trained public health professionals at the centre, state and district levels. The health systems organisation with public health professionals playing a pivotal role therein, are more in evidence in western and southern states of the country. The policy makers and planners have failed to appreciate that the determinants of health also include education, adequate income and nutrition, adequate housing, water, sanitation, empowerment of women etc. Thus, it needs cross-sectoral approaches and quality community based planning.

Praveenlal *et al* (2005) in their study of Kerala aimed to look at the immediate impact of the rise of user charge and their withdrawal on the daily outpatient or inpatient attendance rate. The impact of rise in user charge was sudden fall in the number of patients in the outpatient and inpatient categories. The reason was mainly that majority of patients coming to the hospital belonged to below poverty line families and they could not afford the increased user charges. They may have approached some other facilities or decided to take treatment only in critical situations.

Sandhu *et al* (2005) conducted a study in two cities of Punjab with a sample of 120 respondents who told that they were facing the problem of shabby and unhygienic surroundings, their rooms in their houses being uncomfortable,

neglect on the part of family members regarding their need for a proper dwelling place, insufficiency of lighting thus leading to problems of suffocation, weak eyesight. They are not provided with adequate bathroom provisions and height of the work counters, furniture items was not comfortable for them leading to physical strain.

2.3 CORRELATION AMONG SOCIAL FACTORS AND HEALTH ASPECTS

Mehta and Singh (1988) in their study of Bosti (Hisar) found that 80 per cent of the respondents did not visit the doctor for medical check-up. There was significant association between caste and sex-related disorders as they were more among the respondents belonging to the backward and scheduled castes than among the upper castes. Similarly sex-related disorders in respect of literate and medium to high income respondents were less as compared with illiterates and those representing low income categories. Among illiterate respondents, common, chronic, sex-related, skin and deficiency diseases were more whereas among literates socio-psychological disorders were noted.

Singla (1992) undertook a study in Boha village and Budh Marg Colony of Budhlada city of Bathinda district to study the existing level of living of rural and urban families. The study revealed that the correlation of selected socio-personal characteristics of respondents, viz., education, size of family, social participation of respondents and exposure of respondents to

mass media with level of living of rural and urban families in terms of income and expenditure pattern, housing conditions, sanitation and health status were found to be positive i.e. with the increase or improvement of these characteristics, the level of living of families improves. From the overall observations it was assessed that the level of living of urban families was better than rural families.

Mukhopadhyay *et al* (1993) undertook a study in urban slums of Calcutta and areas covered by urban health centre (Chetla) to study the impact of environmental sanitation services and health care services as important determinants of health. The incidence of sickness per 100 persons was significantly higher among slum dwellers in all ages and sex groups as compared to those residing in *pucca* house under the Urban Health Centre. The females comparatively suffered more than males among slum dwellers whereas the situation was reverse among residents of *pucca* house. It was found that those who availed the Urban Health Centre services and lived in *pucca* house had lesser incidence of the diseases as compared to those who did not avail the services and also resided in the slum as substantiated by the analysis of variance. In case of impact of housing and Urban Health Centre services in relation to average duration of sickness per person it was found that these factors influenced duration of sickness as substantiated through analysis of variance.

Nagabrahmam (1994) carried out a study in Kaira district of

Gujarat to study the impact of health care facilities provided to three major caste groups in the villages of Kaira, i.e. Patels, Solankis and Backward castes (BCs). Not only these caste groups differed on social status and economic status but also in their relative levels of utilisation of health facilities. In general, the health status of the Patel caste was found to be superior as their utilisation of health services for childcare, development and immunisation was shown to be higher as compared to the Solanki caste. Backward castes in general were lagging behind in many aspects of health, but they were able to utilise the help of trained dais. The Patel caste preferred to consult the private doctor, however the Solanki and Backward caste groups showed clear preference for outside - the - village government or primary health centres. Towards explaining health status and differential health behaviour among the three caste groups, it was found that the caste system, the people's education and ability in general had been the most important factors that influenced their health status. The tendency of Backward castes to go to the centre was found to be low and they also tended to avoid meeting the health personnel.

Chakraborti *et al* (1999) conducted a study in six villages of Sundarban region in West Bengal and concluded that there is a clear difference in conception about health among the people of the region according to their socio-economic status. Poor and non-educated segment stressed with more on the physical ability and lack of economic resources in

relation to health, whereas educated and comparatively economically stable segment with some urban influence, stressed more on both physical and emotional stability as a measure of good health. Irrespective of the educational and economic background, both the groups placed sufficient importance to the existing traditional health care system viz., *Gunin, Ojha, Charmer and Priest*. The poor and non-educated group favoured the traditional services mainly because of low cost, often free service, good behaviour, very well social mixing, people belong to the same community, no cultural barrier, understanding the problem according to people's perception. The local rural medical practitioner also enjoyed good faith and perceived quality of care by him was also satisfactory due to differed payment facilities, donot prescribe full course of medicine, they stressed immediate relief of symptoms often by unethical use of drugs like steroid. A small portion of the educated group with urban influence, preferred Government Hospital for investigation facilities like X-ray and blood examination.

Das and Visaria (2002) in their study tried to find out the relationship between certain characteristics such as education of household head, caste, housing structure, per capita monthly household income with qualitative attributes of sanitation behaviour. Higher level of education of the head of the household was found to be positively correlated not only with hygienic practice of disposal of waste but also with better awareness

regarding faecal diseases. Adoption of hygienic method of drawing drinking water had positive association with households with higher income and with better housing structure. Better housing structure was correlated with hygienic practice of waste disposal and also with use of hygienic material especially soap, for cleaning after defecation. The construction of a latrine by a household and awareness about the adverse health implications of excreta disposal were positively correlated.

Ghosh (2004) in his study of 292 women in two villages of Uttar Pradesh found that the poor women in the area under study have very limited access to maternal health care as compared to their rich counterparts. A positive relationship between maternal education and utilization of maternal health care has also been observed. Higher educated women significantly received more antenatal and delivery care as compared to their illiterate counterparts. Religion and caste differentials too have been found in access seeking to maternal health care services. The working mothers received less of maternal health care services than their non-working counterparts. Mass media exposure has positive effect in utilisation of maternal health services and maternal health care utilisation was highest for the first birth order child and steadily decreased as birth order increased.

2.4 SOCIO-ECONOMIC IMPLICATIONS OF HEALTH PROBLEMS

Mahajan (1986) undertook a study of 749 recipients of old age pension in the state of Haryana to analyse the problems faced by these

pensioners. The study revealed that contrary to the general belief that old persons are taken care of by their children or kinsmen, only 28.17% old people were looked after by their kinsmen during ill-health. The economic factors in the shape of dependency and inability to work were the main forces for strained relationships. These respondents having health problems demanded constant care which other members could hardly provide because of their being involved in a struggle for survival, lack of initiative and time. These old people were an additional burden on the family members due to their illness. The respondents mostly (65.55%) perceived the health problem as more serious than other psycho-social and economic problems as they felt that their bad health was the prime cause for their deplorable condition and helplessness because of their inefficiency to work and take care of themselves due to health problems. The common ailments from which these respondents were suffering included diabetes, asthma, tuberculosis, cataracts, pain in joints and abdomen etc.

Kopparty (1991) conducted a study on "Health status of scheduled castes" in Rangampeta Taluk, East Godavari District, Andhra Pradesh in 240 households. In the village 81 per cent persons reported sickness. In all 70 per cent patients were provided with medical facilities. Prevalence of diseases in such a large proportion would lead to lessening of productivity of the nation on one hand and less of earning to family on other hand leading to deprivation of essential items such as food, medicine etc.

Vlassoff *et al* (1996) in their study regarding leprosy in Maharashtra state found that the majority 81.6 per cent patients appeared to be coping with disease however the rest still hid their symptoms as a way of coping due to fear of rejection by the family as the main reason for hiding. Self stigma of the patient could be very severe in families where support is low hindering the effectiveness of treatment. The self-stigma was considerably higher for males than for females as males found it difficult to accept it as a means of loss of social status. The role of family in determining treatment is quite important as it depends upon factors such as family customs, religion, convenience and costs. The family's role in positive treatment seeking may be confounded by the prevalent cultural practice of seeking help from religious and traditional sources. Reasons for consulting traditional, as well as modern sources include lack of funds, easy accessibility and the positive, welcoming reception of patient. Heads of households and those who consulted their spouse were less likely than others to seek religious or traditional treatment before diagnosis. Family support led to greater reliance on medical treatment, although this was mainly for men.

Sharma *et al* (2001) conducted a study in 32 villages of Sundargarh district of Orissa and concluded that the daily activities of the people which include going to the forest for collection of firewood and other forest products in early hours of morning, outdoor activities after dusk, poor

housing conditions coupled with deficient clothing and outdoor sleeping habits without any personal protection are of great significance as socio-cultural determinants of malaria transmission. In case of fever, the tribals do not rush to seek medical advice, rather they prefer to take home remedies either self or through some local healer. In general, tribals believe that diseases are primarily caused by the wrath or displeasure of a deity or spirits of the dead. Estimation of economic loss due to malaria revealed that on an average 8.96 mandays were lost per malaria patient with an average loss of 3.84 mandays to other family members on account of help rendered to the malaria patient. Mean total loss on account of loss in wages and other expenses on treatment, travel and special diet comes to about Rs. 334.91 per malaria episode.

Banerjee *et al* (2004) in their study found that the people who were suffering from ill-health reported difficulties in taking care of themselves, such as bathing, dressing or eating along with difficulty in carrying out the physical activities that are required to earn a living in agriculture. Thirty per cent had difficulty walking 5 km, drawing water from a well or working unaided in the fields. Twenty per cent had difficulty squatting or standing up from a sitting position.

Acharya and Bhate (2005) stated that cultural values, customs, habits, beliefs, attitudes, education, social organisation are social factors affecting health. There is tendency to ignore the social implications of common medical

diseases like tuberculosis, sexually transmitted diseases, aids. There is a stigma attached to these diseases though the stigma is heavier for women than the men. In the typical Indian family, a woman suffering from these diseases tends to hide it from others in the family or her family conceals the fact from outsiders. The women suffering from these diseases were rejected by their families and this results in either the denial of treatment or partial treatment for women. The ascribed roles of women in the society, their contribution towards family both productive and reproductive affect their health status but the general illness of women apart from their reproductive dependency is not worth consideration in family though family can play a vital role in this direction.

CONCLUSION FROM THE VARIOUS STUDIES

After going through the results of various studies it may be concluded that the population suffered from a wide variety of diseases with certain diseases being age-specific and gender-specific like diseases in old age and among women. Apart from common diseases the people were suffering from infectious diseases, chronic diseases, skin diseases, respiratory infections etc. As regards the availability of health facilities it was found that due to inadequacy of funds the medical equipment, drugs and medicines were either very sparse or sometimes not available in the health centres. The laboratory testing facilities were also inadequate and there was widespread absenteeism of the health personnel in the medical institutions during the duty hours specially in rural areas. There was shortage of doctors and health workers which forced the people to seek help from

other sources for medical care. There was no proper arrangement of water supply, electricity in the health institutions thus further deteriorating the situation.

The contributory factors like lack of proper water supply, poor housing conditions, belief in magic and religious powers, considering disease as a wrath of God, use of home-made remedies without proper consultation, home medication led to lingering of the disease. The people generally consulted the *sadhus* or quacks for various health disorders which may sometimes be a potential danger for their lives. The people tend to live in unhygienic conditions without any proper drainage, latrine facilities, no proper disposal of household waste thus creating problems for their health. Still the role of man is strong in deciding about whether the treatment is to be provided to female counterparts and children who consider women as well as children's health at the lowest priority thus deteriorating their health condition. The selection of source of treatment by the people was generally related to their belief system and superstitions.

The literature reviewed further revealed that there was a strong relationship with social factors like caste as people belonging to higher caste got themselves medically examined more commonly and could take better care of their health. The people from low socio-economic profile were more prone to sickness as they visited only the government health facility and low paid quacks while the modern treatment facilities, either private or government were mainly availed by educated group. The use of local medicine and traditional services like going to *Ojhas* and priests was more common among poor and non-educated

group because of low cost, free service, illiteracy and ignorance of people while the educated people preferred scientific medicine. The size of family also influenced the health of the individuals as larger families could not afford to take care of the health of all its members. The females comparatively suffered more than males due to lack of initiative, awareness and access to facilities.

The various implications of health problems included the high economic cost of treatment, waste of valuable time in constant care of ill members, less of earning to the family due to waste of work days. The expenses incurred on travel and special diet are an added burden to the family economy. The people suffering from health problems are incapable to carry out their physical activities. There is also self stigma and social stigma attached to health problems which deteriorates the morale of the individual himself as well as the family.

Chapter-III

MATERIAL AND METHODS

The most important criterion for judging the value of any scientific study is undoubtedly the methods and procedures followed in investigating the problem. Keeping this in view, a systematic procedure was adopted for conducting the study and the research methodology was so designed that the pertinent data could be collected to arrive at reliable and valid conclusions. In this chapter the research methodology followed for carrying out the present investigation has been discussed under the following headings:

3.1 LOCALE OF THE STUDY

The present study was conducted in three districts of Punjab state.

3.2 SELECTION OF DISTRICTS

On the basis of the calculations in terms of agricultural production of major crops of different districts, three groups of 17 districts of Punjab emerged having high, medium and low agricultural development. Out of these three agricultural groups, 3 districts namely Ludhiana, Amritsar and Bathinda were selected for the present investigation.

3.3 SELECTION OF BLOCKS

For present investigation two blocks each from selected

districts were chosen. Out of the total twelve blocks of Ludhiana district, two blocks, Pakhowal and Machhiwara were selected randomly. Similarly out of the total eight blocks of Bathinda, two blocks, Talwandi Sabo and Bhagta Bhaika were selected randomly. Finally out of the sixteen blocks of Amritsar, two blocks, Chaugawan and Jandiala Guru were again selected randomly. So there were six blocks in all representing the rural area of the selected districts.

3.4 SELECTION OF VILLAGES

Two villages representing the rural area from each selected block of the district were chosen randomly for the study. Thus, the total villages came out to be twelve (12).

3.5 SELECTION OF RESPONDENTS

For this study, from each selected village 25 respondents who visited the nearest government health centre were selected randomly from their record. These respondents were identified with the help of the concerned health authorities. In all, the total sample consisted of 300 respondents who were suffering from health problems. Besides these, two functionaries concerned with the health department from each village were also selected for gathering required information about the health set-up in the village thus in all 24 health personnel were also contacted for data collection.

3.6 TOOL OF INVESTIGATION

The research instrument used in the study was the interview-schedule.

3.7 CONSTRUCTION OF SCHEDULE

The interview-schedule which included structured and a few open-ended questions was constructed for collecting data consistent with the specific objectives of the study. The questions were framed in a simple language so that the respondents could easily understand the meaning thereof. Brevity of questions was maintained to elicit exact and precise information and they were arranged in a systematic manner to facilitate smooth conversation and easy collection of data. The overlapping of questions was avoided.

3.8 PRE-TESTING OF THE SCHEDULE

Before administering the final schedule, it was pre-tested among fifteen non-respondents in the Pakhowal block of Ludhiana district which was selected for this study. The purpose of pre-testing was to see the applicability and feasibility of the schedule to collect the desired data. On the basis of the experience gained in pre-testing, necessary modifications were incorporated and the schedule was finalised for data collection.

3.9 COLLECTION OF DATA

Prior to the data collection sufficient rapport was established with the sample families through the concerned health officials at village

level. Data were collected personally with the help of the structured (with few open-ended questions) and pre-tested interview schedule. Before actually interviewing the respondents, they were assured that the information rendered by them was exclusively required for a research-project and the personal identity of any subject would not be divulged to anyone. The responses were obtained from one respondent at a time. For clarification conversation was done in the vernacular language.

3.10 CLASSIFICATION OF DATA

3.10.1 Tabulation of data

Master tables for the data collected were prepared and the data were quantified for precise and systematic analysis and interpretation.

3.10.2 Quantification of data

The qualitative data were quantified to work out percentages and other applicable statistical tests. The different areas in which quantification had been done are as under :

3.10.2.1 Socio-economic characteristics of respondents

- | | | |
|----|------------------------|---|
| 1. | Age of the respondents | Upto 30 yrs : Young group
30-50 yrs : Middle group
Above 50 yrs : Old group |
| 2 | Caste | Higher caste
Backward caste |

		Scheduled caste
3	Family type	Joint
		Nuclear
4	Family size	Upto 4 members : Small family
		5-7 members : Medium family
		8 members and above : Large family
5	Educational level	Illiterate
		Primary
		Matric/10+2
		Graduate and above
6	Occupation	Farming
		Service
		Business
		Labour
		Housewife
7	Total annual income (Rs.)	Upto 40000
		40000-80000
		120000-160000
		160000 and above
8	Land holding	Upto 5 acres : Marginal farmer
	(Operational)	5-10 acres : Small farmer

10-15 acres : Medium farmer

15 acres and above : Large farmer

3.10.2.2 Prevalence of diseases in rural areas and facilities available

3.10.2.3 Factors contributing to rural health problems

3.10.2.4 Socio-economic implications of health problems

3.10.2.5 Information from health personnel regarding the health set-up

3.11 ANALYSIS OF DATA

Statistical tools viz. chi-square test and Karl Pearson correlation coefficient were worked out.

Chi-square test

Chi-square test was applied to see the significant differences between the districts and socio-economic characteristics, prevalence of diseases and facilities available, contributory factors leading to health care problems, socio-economic implications of health problems and information from health personnel. It was calculated as

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

O_i = Observed frequency in i^{th} cell

E_i = Expected frequency in i^{th} cell

Karl Pearson's Coefficient of Correlation

In order to determine the relationship between variables, coefficient of correlation was worked out with the help of Karl Pearson's

Coefficient of correlation under :

$$r_{xy} = \frac{N \sum X_i Y_i - (\sum X_i)(\sum Y_i)}{\sqrt{[N(\sum X_i^2) - (\sum X_i)^2] [N(\sum Y_i^2) - (\sum Y_i)^2]}}$$

Where

r_{xy} = Coefficient of correlation between X and Y.

N = Total number of respondents.

3.12 OPERATIONAL DEFINITIONS

3.12.1 Higher caste : All those castes which do not fall in any reserved category are named high caste, such as *Jats, Brahmin, Rajput* and *Bania* etc. [as per Manual of Punjab Government Instructions on reservation for SC's and BC's (1987)].

3.12.2 Backward caste : The castes like *Lohar, Tarkhan, Ghumar, Nai, Gadria, Julaya, Lobana* were classified as backward caste.

3.12.3 Joint family : It is a type of social grouping where parents and their married and unmarried children live under one roof, eat food cooked at one hearth, hold property in common.

3.12.4 Nuclear family : Unit of family organisation, composed of a married couple and their offsprings.

3.12.5 Family size : It includes the total number of the family members.

3.12.6 Illiterate : The person without any formal education or the person whose education level is below primary.

3.12.7 Operational size of landholding : It is defined as the operational

area of the land which includes land owned by the farmer plus land leased in minus land leased out.

3.12.8 Health - Health is defined as the "state of optimum capacity of an individual for the effective performance of the roles and tasks for which he has been socialised".

3.12.9 Safe drinking water - Safe drinking water is defined as being free from biological contamination (guineaworm, cholera, typhoid etc.) and chemical contamination (excess fluorides, excess iron, arsenic, nitrates etc.)

3.12.10 Sanitation - The concept of sanitation has a comprehensive definition which includes liquid and solid waste disposal, food and personal hygiene and domestic as well as environmental hygiene.

3.12.11 Chronic diseases - Chronic diseases are the diseases which interrupt or impair any or all the natural and regular functions of an organ of a living body for a longer time and also recurring as a disease like hypertension, diabetes, cancer etc.



RESULTS AND DISCUSSION

This chapter is devoted to discuss the results obtained by analyzing the data collected from the field. The results of the study have been presented and discussed under the six major headings :

- 4.1 Socio-economic characteristics of respondents
- 4.2 Prevalence of diseases in rural areas and facilities available
- 4.3 Factors contributing to rural health problems
- 4.4 Correlation among social factors and health aspects
- 4.5 Socio-economic implications of health problems
- 4.6 Information from health personnel regarding the health set-up

4.1 SOCIO-ECONOMIC CHARACTERISTICS OF RESPONDENTS

The appraisal of some aspects of socio-economic characteristics is very important in the field of sociological research. Accordingly, in the forthcoming tables, efforts have been made to spotlight the socio-economic characteristics of the respondents in order to highlight the background of the sample under study, i.e., the persons suffering from health problems.

4.1.1 Age

Table 4.1.1 shows the age of the respondents. The table indicates that out of the total respondents 27.33 per cent were in the age group of 40-50 years while 24.67 per cent in the age group of 50-60 years.

Table 4.1.1 Distribution of respondents according to their age

Age (years)	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Upto 30	12(12.00)	8(8.00)	10(10.00)	30(10.00)	6.90 ^{NS}
30-40	25(25.00)	19(19.00)	18(18.00)	62(20.67)	
40-50	28(28.00)	31(31.00)	23(23.00)	82(27.33)	
50-60	18(18.00)	27(27.00)	29(29.00)	74(24.67)	
60 & Above	17(17.00)	15(15.00)	20(20.00)	52(17.33)	

Figures in parentheses indicate percentages

NS = Non significant

The table further reveals that almost 20 per cent of the respondents were in the age group of 30-40 years followed by 17.33 per cent of the respondents falling in the old-age group of 60 years and above. The remaining 10.00 per cent of the respondents were in the age-group of upto 30 years. The overall result of the table is indicative that majority of the respondents were above 40 years of age. There was no significant difference between the districts as regards age of the respondents.

4.1.2 Sex

The Table 4.1.2 shows the distribution of respondents according to their sex. The data is indicative that more than 50.00 per cent of the respondents were males while the remaining 44.33 per cent were females. There was significant difference between the districts in relation to sex of the respondents.

Table 4.1.2 Distribution of respondents according to their sex

Sex	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Male	45(45.00)	63(63.00)	59(59.00)	167(55.67)	7.24*
Female	55(55.00)	37(37.00)	41(41.00)	133(44.33)	

Figures in parentheses indicate percentages

* Significant at 5% level

4.1.3 Religion

As regards religion Table 4.1.3 reveals that 93.00 per cent of the sampled respondents belonged to the Sikh religion while a few of them, i.e., 7.00 per cent were Hindus by the religion. The whole table is indicative

Table 4.1.3 Distribution of respondents according to their religion

Religion	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Sikh	93(93.00)	88(88.00)	98(98.00)	279(93.00)	7.68*
Hindu	7(7.00)	12(12.00)	2(2.00)	21(7.00)	

Figures in parentheses indicate percentages

* Significant at 5% level

that majority of the respondents hailed from the Sikh religion. There was significant difference between the districts in relation to the religion of the respondents.

4.1.4 Caste category

Table 4.1.4 reflects the caste category of the respondents under the study. The table shows that a majority of the respondents (76.00%) belonged to the high-caste group followed by the backward caste which

Table 4.1.4 Distribution of respondents according to their caste category

Caste category	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Higher caste	76(76.00)	73(73.00)	79(79.00)	228(76.00)	1.13 ^{NS}
Backward caste	14(14.00)	15(15.00)	11(11.00)	40(13.33)	
Scheduled caste	10(10.00)	12(12.00)	10(10.00)	32(10.67)	

Figures in parentheses indicate percentages

NS = Non significant

constituted 13.33 per cent of the total respondents. Almost 10 per cent of the respondents belonged to the scheduled caste. There was no significant difference between the districts as regards to caste category of the respondents.

4.1.5 Family type

Table 4.1.5 shows the family type of the respondents. Out of the total respondents, majority (65.67%) of the respondents belonged to the nuclear families while about one-third (34.33%) had been living in the joint families. The data revealed the dominance of nuclear families indicating the tendency to live in nuclear family instead of joint family in the rural areas

Table 4.1.5 Distribution of respondents according to their family type

Family type	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Joint	29(29.00)	39(39.00)	35(35.00)	103(34.33)	2.25 ^{NS}
Nuclear	71(71.00)	61(61.00)	65(65.00)	197(65.67)	

Figures in parentheses indicate percentages

NS = Non significant

and this may be attributed to the widespread impact of mass media, materialistic thinking and decreased social bonding.

District-wise statistics reveal that in Ludhiana, the number of nuclear families were higher in comparison to that of the other two districts whereas the number of joint families was highest in Bathinda district. There was no significant difference between the districts in relation to family type of the respondents.

4.1.6 Family size

Table 4.1.6 highlights the family size of the respondents under the study. It reveals that nearly half of the respondents, i.e., 50.33 per cent

Table 4.1.6 Distribution of respondents according to their family size

Family size	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Upto 4 members	29(29.00)	12(12.00)	19(19.00)	60(20.00)	10.02*
5-7 members	48(48.00)	54(54.00)	49(49.00)	151(50.33)	
8 and above members	23(23.00)	34(34.00)	32(32.00)	89(29.67)	

Figures in parentheses indicate percentages

* Significant at 5% level

had the family size of 5 to 7 members. The number of respondents having 8 and above family members was 29.67 per cent while 20.00 per cent were having family members upto 4. The overall study indicate that majority of the respondents were having 5 to 8 and even more family members in their family. There was significant difference between the districts as regards the

family size of the respondents.

4.1.7 Education level

The data regarding education level of the respondents is presented in Table 4.1.7. Data indicate that large number of the respondents (41.00%) were illiterate followed by 23.67 per cent of the respondents who

Table 4.1.7 Distribution of respondents according to their education level

Education level	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Illiterate	38(38.00)	45(45.00)	40(40.00)	123(41.00)	13.62*
Primary	25(25.00)	25(25.00)	19(19.00)	69(23.00)	
Matric / 10+2	22(22.0)	27(27.00)	22(22.00)	71(23.67)	
Graduate & above	15(15.00)	3(3.00)	19(19.00)	37(12.33)	

Figures in parentheses indicate percentages

* Significant at 5% level

had studied upto matriculation or 10+2 level. The table further shows that 23.00 per cent of the respondents were educated upto primary level while about 12.00 per cent of the respondents were graduate and above. The table indicates towards poor educational position in the rural areas. There was significant difference between the districts in relation to the education level of the respondents.

4.1.8 Housing type

The type of the house in which the respondents live reflects their standard of living. So, during the field work efforts were made to

Table 4.1.8 Distribution of respondents according to their housing type

Housing type	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
<i>Katcha</i>	4(4.00)	9(9.00)	2(2.00)	15(5.00)	22.77**
Mixed	25(25.00)	51(51.00)	34(34.00)	110(36.67)	
<i>Pucca</i>	71(71.00)	40(40.00)	64(64.00)	175(58.33)	

Figures in parentheses indicate percentages

** Significant at 1% level

assess the type of housing of the respondents and data in this regard is presented in Table 4.1.8. The data is indicative that majority of the respondents, i.e., 58.33 per cent were residing in the *pucca* houses while about one-third of them (36.67%) were having mixed type of houses means partly *pucca* and partly *katcha*. A few of the respondents (5.00%) were found to have *katcha* houses. There difference between the districts in relation to the housing type of the respondents was highly significant.

4.1.9 Occupation

Table 4.1.9 further highlights the occupation pattern of the sample respondents. The table indicates that a majority of the respondents, i.e., 41.67 per cent were engaged in farming. The table further reveals that almost 30 per cent of the respondents were housewives while 15.67 per cent respondents were engaged in services like factory workers, teachers, Anganwari workers, peons, policemen, health workers etc. A few of the respondents, i.e., 7.33 per cent were labourers while the remaining 6.00

Table 4.1.9 Distribution of respondents according to their occupation

Occupation	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Farming	33(33.00)	40(40.00)	52(52.00)	125(41.67)	17.71*
Service	19(19.00)	13(13.00)	15(15.00)	47(15.67)	
Business	5(5.00)	10(10.00)	3(3.00)	18(6.00)	
Labour	13(13.00)	4(4.00)	5(5.00)	22(7.33)	
Housewife	30(30.00)	33(33.00)	25(25.00)	88(29.33)	

Figures in parentheses indicate percentages

* Significant at 5% level

per cent were engaged in some business to earn their livelihood. There was significant difference between the districts in relation to the occupation of the respondents.

4.1.10 Land holdings (operational)

The size of landholding is an important measure of the income and social status of the family in rural life. Data pertaining to the landholdings of the respondents is presented in Table 4.1.10. The data indicates that 24.00 per cent of the respondents were landless. Out of the total respondents who were land holders 21.00 per cent and 22.67 per cent respondents were having land upto 5 acres and between 5-10 acres respectively indicating that majority of the sampled respondents were in the category of marginal and small farmers. Almost one-fifth, i.e., 17.67 per cent of the respondents had 10 to 15 acres of land while 14.67 per cent had more than 15 acres of land thus belonging to the large farmer category. The

Table 4.1.10 Distribution of respondents according to total operational landholding

Total operational landholding (Acres)	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Landless	31(31.00)	23(23.00)	18(18.00)	72(24.00)	20.28**
Upto 5	15(15.00)	21(21.00)	27(27.00)	63(21.00)	
5-10	12(12.00)	30(30.00)	26(26.00)	68(22.67)	
10-15	24(24.00)	12(12.00)	17(17.00)	53(17.67)	
15 & above	18(18.00)	14(14.00)	12(12.00)	44(14.67)	

Figures in parentheses indicate percentages

** Significant at 1% level

difference between the districts in relation to the total operational landholding of the respondents was highly significant.

4.1.11 Total annual income

In order to determine the economic background of the respondents, the total annual income was studied. Table 4.1.11 shows the distribution of respondents according to total annual income. Almost 30 per cent of the respondents had their total annual income between Rs. 80000 to Rs. 120000 while 25.33 per cent of the respondents had annual income between Rs. 40000 to Rs. 80000. A recognizable percentage of respondents, i.e., 20.00 per cent had their annual income between Rs. 120000 to Rs. 160000 followed by 14.67 per cent of the respondents who had their annual income upto Rs. 40000. A small percentage of respondents (11.67%) were

Table 4.1.11 Distribution of respondents according to their total annual income

Total annual income (Rs.)	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Upto 40000	21(21.00)	13(13.00)	10(10.00)	44(14.67)	16.53*
40000-80000	23(23.00)	32(32.00)	21(21.00)	76(25.33)	
80000-120000	32(32.00)	28(28.00)	25(25.00)	85(28.33)	
120000-160000	13(13.00)	19(19.00)	28(28.00)	60(20.00)	
160000 and above	11(11.00)	8(8.00)	16(16.00)	35(11.67)	

Figures in parentheses indicate percentages

* Significant at 5% level

found to be having their annual income above Rs. 160000. On the whole it may be concluded that almost 70 per cent of the respondents of the area under study had their total annual income below Rs. 120000 per annum. There was significant difference between the districts as regards the total annual income of the respondents.

4.1.12 Family consumption expenditure

Table 4.1.12 gives us the information regarding the family consumption expenditure on food items, non-food items and health care. As regards the annual expenditure made on food items like vegetables, foodgrains, pulses, sugar, milk and milk products etc. by the respondents it was observed that almost 50 per cent of the respondents had spent between Rs. 10000 to Rs. 20000 on food items. The table further shows that 38.67 per cent of the respondents spent upto Rs. 10000 on food items while small

Table 4.1.12 Distribution of respondents according to family consumption expenditure (Rs.)

Annual expenditure (in Rs.)	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Food items					
Upto 10000	31(31.00)	43(43.00)	42(42.00)	116(38.67)	6.04 ^{NS}
10000-20000	52(52.00)	49(49.00)	47(47.00)	148(49.33)	
20000 & above	17(17.00)	8(8.00)	11(11.00)	36(12.00)	
Non-food items					
Upto 20000	27(27.00)	39(39.00)	24(24.00)	90(30.00)	7.46 ^{NS}
20000-40000	57(57.00)	48(48.00)	54(54.00)	159(53.00)	
40000 & above	16(16.00)	13(13.00)	22(22.00)	51(17.00)	
Health care					
Upto 5000	50(50.00)	53(53.00)	35(35.00)	138(46.00)	17.03 ^{**}
5000-10000	21(21.00)	34(34.00)	40(40.00)	95(31.67)	
10000-15000	17(17.00)	9(9.00)	13(13.00)	39(13.00)	
15000 & above	12(12.00)	4(4.00)	12(12.00)	28(9.33)	

Figures in parentheses indicate percentages

** Significant at 1% level

NS = Non significant

percentage of respondents, i.e., 12.00 per cent had spent above Rs. 20000.

On the whole it shows that the respondents did not spend much on food items.

The response of the respondents regarding annual expenditure made on non-food items like clothing, housing, education, fuel and socio-

religious ceremonies reveals that more than half of the respondents, i.e., 53.00 per cent had made expenditure between Rs. 20000 to Rs. 40000 on non-food items. This was followed by 30.00 per cent of the respondents who had made expenditure below Rs. 20000 on non-food items. The remaining 17.00 per cent of the respondents spent above Rs. 40000.

The table further depicts the information regarding the annual expenditure on health care. It shows that majority of the respondents, i.e., 46.00 per cent had spent upto Rs. 5000 on health care followed by 31.67 per cent of the respondents who had spent between Rs. 5000 to Rs. 10000 on health care. A few respondents each, i.e., 13.00 per cent and 9.33 per cent had spent between Rs. 10000 to Rs. 15000 and above Rs. 15000 respectively. On the whole the table is indicative that almost 80 per cent of the respondents had spent below Rs. 10000 on health care. The difference between the districts in relation to the expenditure on food items and non-food items was non-significant but the difference was highly significant in relation to expenditure on health care.

4.2 PREVALENCE OF DISEASES IN RURAL AREAS AND FACILITIES AVAILABLE

What were the major diseases and their status of prevalence along with the availability of health facilities in the area of study? These type of issues were probed and the results are discussed in the forthcoming tables.

4.2.1 Diseases suffered by the respondents

Table 4.2.1 shows the diseases from which the respondents were suffering. It was observed that almost one-third of the respondents

Table 4.2.1 Distribution of respondents according to diseases from which they were suffering

Diseases	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)
General diseases				
Heart problem	3(3.00)	6(6.00)	12(12.00)	21(7.00)
Gastric & stomach problems	23(23.00)	15(15.00)	11(11.00)	49(16.33)
Malaria	8(8.00)	5(5.00)	4(4.00)	17(5.67)
Typhoid	5(5.00)	6(6.00)	7(7.00)	18(6.00)
Anaemia	34(34.00)	38(38.00)	24(24.00)	96(32.00)
Reproductive health problem	30(30.0)	23(23.00)	18(18.00)	71(23.67)
Respiratory infection/ asthma	3(3.00)	18(18.00)	5(5.00)	26(8.67)
ENT problems	21(21.00)	11(11.00)	13(13.00)	45(15.00)
Eye problems	20(20.00)	16(16.00)	31(31.00)	67(22.33)
Joint pain	16(16.00)	23(23.00)	14(14.00)	53(17.67)
Any other	8(8.00)	8(8.00)	11(11.00)	27(9.00)
Chronic diseases				
Hypertension/blood pressure	28(28.00)	33(33.00)	34(34.00)	95(31.67)
Diabetes	29(29.00)	13(13.00)	16(16.00)	58(19.33)
Skin disease	3(3.00)	29(29.00)	9(9.00)	41(13.67)
Goitre formation/ thyroid enlargement	2(2.00)	4(4.00)	1(1.00)	7(2.33)

Figures in parentheses indicate percentages

Multiple response

each suffered from anaemia (32.00%) and hypertension (31.67%). This was followed by those who suffered from reproductive health problem (23.67%), eye problems (22.33%), diabetes (19.33%), joint pain (17.67%), gastric and stomach problems (16.33%), Ear, Nose and Throat (ENT) problems (15.00%) and skin disease (13.67%). A few of the respondents each suffered from respiratory infection (8.67%), heart problem (7.00%), typhoid (6.00%), malaria (5.67%) and thyroid enlargement (2.33%). Apart from this 9.00 per cent of the respondents suffered from diseases other than the mentioned above like tuberculosis, teeth problem etc. Though people told about their prime disease yet many were found suffering from multiple diseases and some were even unexplained diseases. It was also observed that people hesitate to tell about their diseases and major reason may be due to fear of socio-cultural stigmas.

4.2.2 Members suffering from health problem

Besides the respondents of the study efforts were made to know about the illness of their family members so as to have an estimate regarding the time and money spent by the respondents on their health problems and results are discussed in Table 4.2.2. The table reveals that almost 40 per cent of the respondents told that four or more members in their family had suffered from any disease or health problem followed by 27.67 per cent of the respondents who told that three members in their family had suffered from any disease or health problem. In case of 23.66 per cent respondents

Table 4.2.2 Distribution of respondents according to the number of members who are suffering from health problem or disease

Number of members suffering	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
One member	15(15.00)	10(10.00)	8(8.00)	33(11.00)	5.21 ^{NS}
Two members	24(24.00)	20(20.00)	27(27.00)	71(23.66)	
Three members	28(28.00)	31(31.00)	24(24.00)	83(27.67)	
Four or more members	33(33.00)	39(39.00)	41(41.00)	113(37.67)	

Figures in parentheses indicate percentages

NS = Non significant

two members had suffered from any disease or health problem while 11.00 per cent respondents told that one member had suffered from any disease or health problem. On the whole 65 per cent of the respondents told that three or more members had suffered from any health problem or disease. There was no significant difference between the districts of regards the number of family members suffering from health problems.

4.2.3 Diseases from which family members were suffering

Table 4.2.3 reveals the data regarding the diseases from which family members were suffering. All the respondents, i.e., 100.00 per cent told that their family members had suffered from headache, ENT problems and gastric and stomach problems. Almost 70 per cent of the respondents told that their family members had suffered from hypertension followed by 67.00 per cent and 66.67 per cent of the respondents who told that their family members had suffered from diarrhoea and vomiting and eye

Table 4.2.3 Distribution of respondents according to the diseases from which their family members were suffering

(2002-2005)

Diseases from which family members were suffering	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)
General diseases				
Diarrhoea/vomitting	68(68.00)	72(72.00)	61(61.00)	201(67.00)
Malaria	21(21.00)	32(32.00)	26(26.00)	79(26.33)
Headache	100(100.00)	100(100.00)	100(100.00)	300(100.00)
Pneumonia	8(8.00)	13(13.00)	15(15.00)	36(12.00)
Typhoid	14(14.00)	17(17.00)	22(22.00)	53(17.67)
ENT Problems	100(100.00)	100(100.00)	100(100.00)	300(100.00)
Gastric and stomach problems	100(100.00)	100(100.00)	100(100.00)	300(100.00)
Heart problem	12(12.00)	7(7.00)	8(8.00)	27(9.00)
Anaemia	52(52.00)	63(63.00)	46(46.00)	161(53.67)
Respiratory infections	21(21.00)	42(42.00)	17(17.00)	80(26.67)
Eye problems	72(72.00)	67(67.00)	61(61.00)	200(66.67)
Reproductive health problems	43(43.00)	35(35.00)	49(49.00)	127(42.33)
Polio	3(3.00)	2(2.00)	-	5(1.67)
Joint problem	28(28.00)	40(40.00)	47(47.00)	115(38.33)
Chronic diseases				
Skin disease	12(12.00)	31(31.00)	23(23.00)	66(22.00)
Goitre formation	7(7.00)	18(18.00)	4(4.00)	29(9.67)
Hypertension	74(74.00)	62(62.00)	69(69.00)	205(68.33)
Diabetes	41(41.00)	26(26.00)	32(32.00)	99(33.00)
Tuberculosis	4(4.00)	9(9.00)	6(6.00)	19(6.33)
Cancer	9(9.00)	3(3.00)	5(5.00)	17(5.67)

Figures in parentheses indicate percentages

Multiple response

problems respectively. Further 53.67 per cent of the respondents told that their family members had suffered from anaemia while 42.33 per cent of the respondents told that they had suffered from reproductive health problems. The other health problems from which the family members were suffering included joint problem (38.33%), diabetes (33.00%), respiratory infections (26.67%), malaria (26.33%), skin disease (22.00%), typhoid (17.67%), pneumonia (12.00%), goitre formation (9.67%), heart problem (9.00%), tuberculosis (6.33%), cancer (5.67%) and polio (1.67%). So there were certain common health problems like headache, Ear, Nose and Throat (ENT) problems, gastric and stomach problems, hypertension, eye problems, diarrhoea and vomiting which were mentioned by a large proportion of the respondents.

4.2.4 Percentage of population in villages suffering from common and chronic diseases

After knowing the spread of diseases efforts were made to know the approximate percentage of population suffering from various diseases and even the chronic ones. The data gathered through the health personnel on the issue is given in Table 4.2.4. The table shows that 14.00 per cent of the population was suffering from common diseases in Dhodipura out of which 6.00 per cent were suffering from chronic diseases like hypertension, diabetes, cancer, tuberculosis etc. Further, the table shows that 13.00 per cent of the population was suffering from common diseases in Gujjarwal out

Table 4.2.4 Percentage of population in villages suffering from common and chronic diseases

Name of village	Population of village (persons)	Percentage of population suffering from common diseases	Percentage of population suffering from chronic diseases
Gujjarwal	7209	13.00	4.00
Mansuran	6470	11.00	3.50
Herian	1298	9.00	3.00
Kotala	1480	8.00	2.00
Dhodipura	5860	14.00	6.00
Aklian Jalal	4625	12.00	3.00
Jewan Singh Wala	3630	11.00	5.00
Singo	3285	10.50	4.00
Boparai Kalan	4700	13.00	5.50
Lopoke	6798	10.00	4.00
Gehri Mandi	5104	11.50	5.00
Bhangwan	3835	11.00	3.00
Average	4524.5	11.17	4.00

Note : Information was obtained from health personnel

of which 4.00 per cent was suffering from chronic diseases and in Boparai Kalan too 13.00 per cent of population was suffering from common diseases out of which 5.50 per cent was suffering from chronic diseases. In Aklian Jalal 12.00 per cent of population was suffering from common diseases out of which 3.00 per cent was suffering from chronic diseases. In Gehri Mandi 11.50 per cent of population was suffering from common diseases while 5.00 per cent was suffering from chronic diseases. Further 11.00 per cent of

population was suffering from common diseases in Mansuran while 3.50 per cent was suffering from chronic diseases and again 11.00 per cent of population was suffering from common diseases in Jewan Singh Wala out of which 5.00 per cent was suffering from chronic diseases. Then 11.00 per cent of population in Bhangwan too was suffering from common diseases out of which 3.00 per cent was suffering from chronic diseases.

In case of Singo 10.50 per cent of population was suffering from common diseases out of which 4.00 per cent was suffering from chronic diseases while 10.00 per cent of population was suffering from common diseases in Lopoke and 4.00 per cent was suffering from chronic diseases. Also in Herian 9.00 per cent of population was suffering from common diseases out of which 3.00 per cent was suffering from chronic diseases while 8.00 per cent of population was suffering from common diseases in Kotala and 2.00 per cent was suffering from chronic diseases. The average population of villages came out to be 4524.5 out of which 11.17 per cent population on an average was suffering from common diseases and 4.00 per cent was suffering from chronic diseases. Though during data collection efforts were made to garner the correct information regarding the population suffering from common diseases and chronic diseases but due to social stigmas the mental and psychological diseases are not divulged by the population. If apart from the physical diseases the unexplained diseases, psychological problems like depression, irritability are also included then

the percentage would come on the higher side.

4.2.5 Regular health check-up

It was tried to garner information on the issue whether the respondents went for health check-up regularly and data on this issue is presented in Table 4.2.5. The table reveals that almost 75 per cent of the respondents told that they did not go for health check-up regularly while the rest had gone for health check-up regularly. Out of those who did not go for health check-up regularly 56.25 per cent told that there was no need of regular health check-up followed by almost 49 per cent of the respondents

Table 4.2.5 Distribution of respondents according to whether they go for health check-up regularly

Regular health check-up	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	32(32.00)	18(18.00)	26(26.00)	76(25.33)	5.22 ^{NS}
No	68(68.00)	82(82.00)	74(74.00)	224(74.67)	

Reasons for non-regularity in health check-up	Ludhiana (n=68)	Bathinda (n=82)	Amritsar (n=74)	G. Total (n=224)
Lack of funds	18(26.47)	27(32.93)	23(31.08)	68(30.36)
Shortage of time	34(50.00)	39(47.56)	37(50.00)	110(49.11)
Lack of faith in usefulness of health check-up	20(29.41)	24(29.27)	28(37.84)	72(32.14)
No need of regular health check-up	39(57.35)	50(60.97)	37(50.00)	126(56.25)
Any other	7(10.29)	3(3.66)	5(6.76)	15(6.70)

Figures in parentheses indicate percentages

Multiple response

NS = Non-significant

who did not go for regular check-up due to shortage of time. Almost 30 per cent of the respondents each did not go for check-up due to lack of faith in usefulness of health check-up (32.14%) and due to lack of funds (30.36%). Apart from this 6.70 per cent of the respondents had given other reasons like carelessness, long distance of health facility, illiteracy etc. for non-regularity in health check-up. There was no significant difference between the districts in relation to whether respondents go for health check up regularly.

4.2.6 Location and distance of nearest government health institution

Location of institution also matter to some extent to get the treatment of disease. Proper location of the institution may be helpful for regularity in health check up but the larger distances may hamper the proper use of health institution itself. Efforts were made to know the distance of nearest health institution in the area of study and the data is given in Table 4.2.6. The table shows that 58.33 per cent of the respondents told that the nearest government health institution was located outside the village while 41.67 per cent of the respondents told that it was located within the village. The table further reveals that in case of distance of nearest government health institution almost an equal number of respondents, i.e., 40.00 per cent and 37.67 per cent told that it was less than 1 kilometer or between 1 to 2 kilometers respectively. Twenty two per cent of the respondents reported the distance to be between 2 to 3 kilometers. This shows that a large majority, i.e., 78 per cent of the respondents had the nearest government

Table 4.2.6 Distribution of respondents according to location and distance of nearest government health institution

Nearest government health institution	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Location					
Within the village	50(50.00)	25(25.00)	50(50.00)	125(41.67)	17.37**
Outside the village	50(50.00)	75(75.00)	50(50.00)	175(58.33)	
Distance					
Less than 1 km	39(39.00)	30(30.00)	51(51.00)	120(40.00)	11.69*
1-2 kms	41(41.00)	46(46.00)	26(26.00)	113(37.67)	
2-3 kms	20(20.00)	24(24.00)	23(23.00)	67(22.33)	

Figures in parentheses indicate percentages

* Significant at 5% level

** Significant at 1% level

health institution within the range of 2 kilometers. There was highly significant difference between the districts as regards the location of nearest government health institution. As regards the distance of nearest government health institution the difference between the districts was significant too.

4.2.7 Health institutions visited during illness

An effort was made to identify both the public and private health institutions visited by the respondents during illness and data in this regard is presented in Table 4.2.7. Out of those respondents who visited the public health institutions majority, i.e., 89.00 per cent visited the government dispensary or subsidiary health centre (SHC) while 34.00 per cent visited the primary health centre (PHC) or community health centre

(CHC) at block level. Almost 17 per cent of the respondents visited the sub-centre in their village. It was found during data collection that though many of the respondents visiting the subsidiary health centre (SHC) were advised to visit the primary health centre (PHC) at block level by the staff but due to financial constraints, laziness or carelessness they didnot do so.

Table 4.2.7 Distribution of respondents according to health institutions visited during illness

Health institutions visited during illness	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)
Public				
PHC/CHC	36(36.00)	26(26.00)	40(40.00)	102(34.00)
Government dispensary/ SHC	100(100.00)	82(82.00)	85(85.00)	267(89.00)
Sub-centre	-	25(25.00)	25(25.00)	50(16.67)
Private				
Hospital	28(28.00)	21(21.00)	23(23.00)	72(24.00)
Nursing home	22(22.00)	14(14.00)	28(28.00)	64(21.33)
Clinic (Allopathic)	37(37.00)	27(27.00)	36(36.00)	100(33.33)
Clinic (Ayurvedic)	17(17.00)	19(19.00)	16(16.00)	52(17.33)
Clinic (Homeopathic)	9(9.00)	7(7.00)	11(11.00)	27(9.00)
Chemist shop	37(37.00)	42(42.00)	39(39.00)	118(39.33)
<i>Dera/Mazar</i>	28(28.00)	34(34.00)	30(30.00)	92(30.67)

Figures in parentheses indicate percentages

Multiple response

In case of private health institutions almost 40 per cent of the respondents preferred to take treatment from chemist shop followed by 33.33 per cent respondents who visited the allopathic clinic and 30.67 per cent of the respondents who went to some *dera/mazar*. Furthermore 24.00 per cent respondents visited the hospital while 21.33 per cent respondents went to some nursing home for treatment. The table also shows that 17.33 per cent of the respondents visited the ayurvedic clinic while 9.00 per cent of the respondents visited some homeopathic clinic. This shows that a bulk of respondents, i.e., 30 per cent still relied on non-institutional sources of treatment like *dera/mazar* due to their illiteracy, ignorance and superstitious attitude towards illness.

4.2.8 Reasons for treatment from public and private health institutions

What were the preferences of the respondents for having treatment of the illness? This issue was also probed and data is given in table 4.2.8 which indicates that 74.00 per cent of the respondents went for treatment from public health institutions due to free facility or low cost treatment followed by 54.00 per cent of the respondents who gave the reason as near home (easily accessible). Almost an equal number of respondents, i.e., 33.33 per cent and 31.33 per cent gave the reasons as availability of qualified doctor and satisfactory treatment respectively. A small proportion of respondents, i.e., 18.00 per cent gave the reason for treatment as doctor is known to them.

Table 4.2.8 Distribution of respondents according to reasons for treatment from public and private health institutions

Reasons for treatment from	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)
Public health institutions				
Satisfactory treatment available	34(34.00)	28(28.00)	32(32.00)	94(31.33)
Free facility/low cost treatment	73(73.00)	76(76.00)	73(73.00)	222(74.00)
Qualified doctor	39(39.00)	23(23.00)	38(38.00)	100(33.33)
Doctor is known	17(17.00)	15(15.00)	22(22.00)	54(18.00)
Near home (easily accessible)	48(48.00)	55(55.00)	59(59.00)	162(54.00)
Private health institutions				
Qualified doctor	46(46.00)	39(39.00)	43(43.00)	128(42.67)
Satisfactory treatment	53(53.00)	47(47.00)	57(57.00)	157(52.33)
Doctor is known	22(22.00)	13(13.00)	17(17.00)	52(17.33)
Near home (easily accessible)	40(40.00)	34(34.00)	38(38.00)	112(37.33)
Specialised facility available	21(21.00)	13(13.00)	16(16.00)	50(16.67)
Personal attention given	20(20.00)	24(24.00)	17(17.00)	61(20.33)
Lack of facilities in public health institutions	60(60.00)	68(68.00)	54(54.00)	182(60.67)
Unavailability of qualified doctors in government institution	41(41.00)	55(55.00)	42(42.00)	138(46.00)

Figures in parentheses indicate percentages
Multiple response

The table further shows that in case of treatment from private health institutions almost 60 per cent of the respondents gave the reason as

lack of facilities in public health institutions followed by 52.33 per cent of the respondents who told that they received satisfactory treatment from private health institutions. Almost an equal number of respondents, i.e., 46.00 per cent and 42.67 per cent gave the reasons as unavailability of qualified doctors in government institutions and on the contrary the availability of qualified doctor in private health institutions. The other reasons for treatment from private health institutions given by respondents were near home (37.33%), personal attention given (20.33%), doctor is known (17.33%) and specialised facility available in these institutions (16.67%).

4.2.9 Visit to the government health centre at village level

The distribution of the respondents according to the number of times they visited the government health centre in the village is presented in Table 4.2.9. The table shows that 17.67 per cent of the respondents did not visit the government health centre at all during the last one month. The table further reveals that 30 per cent of the respondents told that they visited the government health centre at village level three times during the last one month while 25.67 per cent of the respondents visited the health centre two times during last one month. The table also shows that 14.33 per cent of the respondents visited the government health centre four or more times and 12.33 per cent of the respondents visited the government health centre at village level only once during the last one month. There was significant

Table 4.2.9 Distribution of respondents according to number of times they visited the government health centre in the village during last one month

Number of times visited the government health centre	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Not visited	23(23.00)	17(17.00)	13(13.00)	53(17.67)	15.78*
One time	7(7.00)	13(13.00)	17(17.00)	37(12.33)	
Two times	35(35.00)	23(23.00)	19(19.00)	77(25.67)	
Three times	25(25.00)	31(31.00)	34(34.00)	90(30.00)	
Four times or more	10(10.00)	16(16.00)	17(17.00)	43(14.33)	

Figures in parentheses indicate percentages

* Significant at 5% level

difference between the districts as regards the number of the times the respondents visited the government health centre in the village.

4.2.10 Whether the treatment in government health centre at village level is proper

Table 4.2.10 shows the distribution of respondents according to whether they get proper treatment in government established health centre at village level. The table reveals that 68.67 per cent of the respondents told that they did not get proper treatment in government established health centre at village level with maximum respondents from District-II, i.e., Bathinda. There was no significant difference between the districts as regards whether the respondents get proper treatment in government established health centre. Out of the total 63.59 per cent of the respondents

Table 4.2.10 Distribution of respondents according to whether they get proper treatment in government established health centre at village level

Get proper treatment in government established health centre	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	34(34.00)	28(28.00)	32(32.00)	94(31.33)	0.91 ^{NS}
No	66(66.00)	72(72.00)	68(68.00)	206(68.67)	

Reasons for not getting proper treatment in government established health centre	Ludhiana (n=66)	Bathinda (n=72)	Amritsar (n=68)	G. Total (n=206)
No doctor appointed	19(28.79)	53(73.61)	-	72(34.95)
Doctor donot come in time	33(50.00)	-	28(41.18)	61(29.61)
Doctor is irregular in duty	29(43.94)	-	38(55.88)	67(32.52)
Lack of proper attention by health staff	32(48.48)	50(69.44)	36(52.94)	118(57.28)
Medicines are inadequate	36(54.54)	56(77.78)	39(57.35)	131(63.59)
No laboratory testing facilities	30(45.45)	44(61.11)	35(51.47)	109(52.91)
No proper sitting arrangement	22(33.33)	36(50.00)	31(45.59)	89(43.20)
Inadequate facilities for indoor patients	15(22.73)	17(23.61)	11(16.18)	43(20.87)
Any other	6(9.09)	3(4.17)	-	9(4.37)

Figures in parentheses indicate percentages

Multiple response

NS = Non significant

gave the reason for not getting proper treatment in government established health centre as inadequacy of medicines followed by 57.28 per cent of the respondents who gave the reason as lack of proper attention by health staff

and 52.91 per cent of the respondents who told that there were no laboratory testing facilities in the government established health centre.

The table further shows that 43.20 of the respondents gave the reason as no proper sitting arrangement followed by reasons like no doctor appointed (34.95%), doctor is irregular in duty (32.52%), doctor donot come in time (29.61%), inadequate facilities for indoor patients (20.87%). Apart from this 4.37 per cent of the respondents gave reasons other than the mentioned above like non-availability of specialists, doctor writes only prescription etc. On the whole data is 'indicative that majority of the respondents did not get proper treatment in government institutions due to varied reasons and perhaps due to this the private institutions and quacks are mushrooming in the rural areas.

4.2.11 Health problems for which government health centre at block level is visited

Table 4.2.11 highlights the health problems for which the government health centre at block level is visited. The table shows that 35.29 per cent of the respondents visited the government health centre at block level for diabetes followed by 33.33 per cent of the respondents who were anaemic and 30.39 per cent respondents who had reproductive health problem. Furthermore 27.45 per cent respondents went for treatment of Ear, Nose and Throat (ENT)/eye problems while 17.65 per cent respondents went for skin diseases. The other diseases or health problems for which they

Table 4.2.11 Distribution of respondents according to the health problems for which they visit the government health centre at block level

Health problems for which they visit	Ludhiana (n=36)	Bathinda (n=26)	Amritsar (n=40)	G. Total (n=102)
Diabetes	19(52.78)	7(26.92)	10(25.00)	36(35.29)
Skin diseases	2(5.56)	12(46.15)	4(10.00)	18(17.65)
ENT/Eye problems	7(19.44)	5(19.23)	16(40.00)	28(27.45)
Typhoid	3(8.33)	2(7.69)	4(10.00)	9(8.82)
Reproductive health problem	13(36.11)	10(38.46)	8(20.00)	31(30.39)
Malaria	3(8.33)	1(3.85)	2(5.00)	6(5.88)
Tuberculosis	4(11.11)	2(7.69)	2(5.00)	8(7.84)
Heart problem	2(5.55)	3(11.54)	6(15.00)	11(10.78)
Anaemia	11(30.55)	9(34.61)	14(35.00)	34(33.33)

Figures in parentheses indicate percentages
Multiple response

visited the health centre at block level were heart problem (10.78%), typhoid (8.82%), tuberculosis (7.84%) and malaria (5.88%). The respondents had to visit the government health centre at block level mainly due to inadequacy of facilities at the government health centre of the village like medicines, laboratory facilities, non-availability of doctor etc.

4.2.12 Health professionals from block staff visiting the village

Table 4.2.12 shows the response of the respondents regarding the number of times the health professionals from block staff visited their village. The table reveals that 38.67 per cent respondents told that the health professionals from block staff visited their village only once a month with

Table 4.2.12 Distribution of respondents according to the number of times the health professionals from block staff visit their village

Number of times health staff visit their village	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Once a week	18(18.00)	-	35(35.00)	53(17.67)	58.01**
After 2-3 weeks	38(38.00)	32(32.00)	36(36.00)	106(35.33)	
Once a month	35(35.00)	52(52.00)	29(29.00)	116(38.67)	
Whenever they feel	9(9.00)	16(16.00)	-	25(8.33)	

Figures in parentheses indicate percentages

** Significant at 1% level

maximum proportion of respondents from District-II, i.e., Bathinda. Almost 35 per cent of the respondents told that the health professionals from block staff visited their village after 2-3 weeks followed by 17.67 per cent respondents who told that they visited once a week. A few of the respondents 8.33 per cent told that the health staff visited their village whenever they feel and there is no regularity in their visit to the health centres at village level. The difference between the districts as regards the number of times health staff visit their village is highly significant. The overall result of the data is indicative that the doctors appointed in the rural areas visited the health centres on their own free will leaving most of the people on the mercy of lower level staff which in many cases is not available.

4.3 FACTORS CONTRIBUTING TO RURAL HEALTH PROBLEMS

To know the various factors which contribute and even promote the health problems was one of the important objectives of the present study. The information collected on this issue is discussed in the following tables.

4.3.1 Provisions in the house

From the various factors firstly it was tried to know as to whether the respondents have adequate housing facilities because inadequacy of the housing facility may create lot of physical and psychological diseases. Table 4.3.1 shows the distribution of respondents according to provisions in the house. The information given in the table

Table 4.3.1 Distribution of respondents according to provisions in the house

Provisions in the house	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)
LPG (gas chullah)	76(76.00)	65(65.00)	70(70.00)	211(70.33)
Smokeless chullah	7(7.00)	-	3(3.00)	10(3.33)
Separate kitchen	81(81.00)	78(78.00)	75(75.00)	234(78.00)
Exhaust fan in kitchen	19(19.00)	4(4.00)	8(8.00)	31(10.33)
Wiremesh doors	30(30.00)	21(21.00)	35(35.00)	86(28.67)
Separate bathroom/ latrines	81(81.00)	77(77.00)	84(84.00)	242(80.67)
Proper facility for ventilation	71(71.00)	62(62.00)	67(67.00)	200(66.67)

Figures in parentheses indicate percentages
Multiple response

shows that 80.67 per cent of the respondents had separate bathroom of latrines in their house but mostly these were uncovered without proper ventilation. These uncovered bathrooms created inconvenient situation during rainy and winter season and in hot weather. Further 78.00 per cent respondents had separate kitchen followed by 70.33 per cent respondents having Liquified Petroleum Gas (LPG)/gas chullah. The kitchen was open in some houses so in case of unfavourable climatic conditions, they had to shift cooking to living rooms. Further 66.67 per cent of the respondents had proper facility for ventilation in the house while 28.67 per cent respondents had wiremesh doors and 10.33 per cent respondents had exhaust fan in kitchen. A few, i.e., 3.33 per cent respondents had smokeless chullah so mostly the respondents were living in smoky conditions.

4.3.2 Drinking water supply system in the house

Table 4.3.2 shows the distribution of respondents according to drinking water supply system in the house. The table shows that 68.33 per

Table 4.3.2 Distribution of respondents according to drinking water supply system in their house

Drinking water supply system in their house	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Handpump	12(12.00)	26(26.00)	14(14.00)	52(17.33)	10.95*
Water taps	77(77.00)	61(61.00)	67(67.00)	205(68.33)	
Tubewell/motor	11(11.00)	13(13.00)	19(19.00)	43(14.33)	

Figures in parentheses indicate percentages

* Significant at 5% level

cent of the respondents had water taps as source of drinking water supply but water comes in these taps irregularly. Further 17.33 per cent of the respondents had installed handpumps as source of drinking water at their own home. Although people had installed handpumps at their own homes but the quality of water was very poor specially in Bathinda where the water was heavy and salty. The tubewell/motor was source of water in case of 14.33 per cent of the respondents. There was significant difference between the districts in relation to drinking water supply system in the house.

4.3.3 Stagnation of water around the house

The distribution of respondents according to stagnation of water around the house is depicted in Table 4.3.3. A majority, i.e., 73.00 per cent of the respondents told that there was no stagnation of water around the

Table 4.3.3 Distribution of respondents according to whether there is stagnation of water around their house

Whether stagnation of water	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	28(28.00)	19(19.00)	34(34.00)	81(27.00)	7.54*
No	72(72.00)	81(81.00)	66(66.00)	219(73.00)	

When there is stagnation of water	Ludhiana (n=28)	Bathinda (n=19)	Amritsar (n=34)	G. Total (n=81)	χ^2 value
Always	4(14.28)	4(21.05)	2(5.88)	10(12.34)	2.94 ^{NS}
Mostly	11(39.28)	6(31.58)	13(38.23)	30(37.04)	
Sometimes	13(46.43)	9(47.37)	19(55.88)	41(50.62)	

Figures in parentheses indicate percentages

* Significant at 5% level

NS = Non significant

house while 27.00 per cent told that there was stagnation of water. Out of those who had water stagnation around the house almost 50 per cent told that sometimes water was stagnant around their house while 37.04 per cent told that mostly water was stagnant around their house. A few, i.e., 12.34 per cent told that water was always stagnant around their house due to overflowing drains in the streets. There was significant difference between the districts as regards whether water was stagnant around the house of the respondents while there no significant difference between the districts as regards the time of stagnation of water around their house. Stagnation of water around the houses was noted as one of the big factor for creating diseases specially the water borne.

4.3.4 Place of garbage disposal

Table 4.3.4 gives the distribution of respondents according to

Table 4.3.4 Distribution of respondents according to the place of garbage disposal

Place of garbage disposal	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
In one corner of the house	16(16.00)	8(8.00)	20(20.00)	44(14.67)	13.45*
In the street	7(7.00)	13(13.00)	5(5.00)	25(8.33)	
In the common garbage disposal area	56(56.00)	62(62.00)	49(49.00)	167(55.67)	
Adjoining open areas	21(21.00)	17(17.00)	26(26.00)	64(21.33)	

Figures in parentheses indicate percentages

* Significant at 5% level

the place of garbage disposal. The table shows that more than 50 per cent of the respondents (55.67%) told that they disposed off the garbage in the common garbage disposal area followed by 21.33 per cent respondents who disposed the garbage in adjoining open areas which sometimes flows into streets. In rainy season it created the breeding ground for mosquitoes and led to water borne diseases like diarrhoea, cholera, tuberculosis etc. The table further shows that 14.67 per cent of the respondents disposed off the garbage in one corner of the house in dustbins or other storage containers. Only 8.33 per cent of the respondents disposed off the garbage in the street. There was significant difference between the districts as regards the place of garbage disposal by the respondents.

4.3.5 Keeping of animals

Table 4.3.5 reveals the distribution of respondents whether they have kept animals and place for keeping animals. The table indicates that 62.33 per cent of the respondents had kept animals while the rest said 'No' in this regard. As regards the place for keeping animals 57.75 per cent respondents told that they had kept animals within the residential area so cohabitation of man and animals became a serious source of ill-health sometimes. The cattle dung was thrown at home only as it was perceived convenient to throw it at home or in adjoining areas of home. Further 27.27 per cent of the respondents had kept their animals in separate courtyard. The cattle dung sometimes flows into streets leading to dirty and smelly

Table 4.3.5 Distribution of respondents according to whether they have kept animals and place for keeping animals

Whether kept animals	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	58(58.00)	62(62.00)	67(67.00)	187(62.33)	1.73 ^{NS}
No	42(42.00)	38(38.00)	33(33.00)	113(37.67)	

Place of keeping animals	Ludhiana (n=58)	Bathinda (n=62)	Amritsar (n=67)	G. Total (n=187)	χ^2 value
In separate courtyard	17(29.31)	13(20.97)	21(31.34)	51(27.27)	5.95 ^{NS}
Within the residential area	35(60.34)	41(66.13)	32(47.76)	108(57.75)	
In the fields	6(10.34)	8(12.90)	14(20.89)	28(14.97)	

Figures in parentheses indicate percentages

NS = Non significant

surroundings and ultimately resulting in disease prone conditions which adversely affect the health of people. A little above 14 per cent of the respondents had kept their animals in the fields. There was no significant difference between the districts as regards whether the respondents had kept animals and place for keeping animals.

4.3.6 Washing hands before and after meals

The distribution of respondents according to whether they wash their hands before and after meals is presented in Table 4.3.6. The data indicate that 35.00 per cent of the respondents sometimes washed their hands before and after meals followed by 30.00 per cent of the respondents who mostly washed their hands. Almost 20 per cent of the respondents never

Table 4.3.6 Distribution of respondents according to whether they wash their hands before and after meals and with what

Whether wash their hands before and after meals	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Never	18(18.00)	15(15.00)	26(26.00)	59(19.67)	8.49 ^{NS}
Sometimes	40(40.00)	31(31.00)	34(34.00)	105(35.00)	
Mostly	25(25.00)	38(38.00)	27(27.00)	90(30.00)	
Every time	17(17.00)	16(16.00)	13(13.00)	46(15.33)	

What they use to wash hands	Ludhiana (n=82)	Bathinda (n=85)	Amritsar (n=74)	G. Total (n=241)	χ^2 value
Soap	30(36.58)	26(30.59)	29(39.19)	85(35.27)	3.18 ^{NS}
Ash	2(2.44)	3(3.53)	1(1.35)	6(2.49)	
Sand	1(1.22)	-	1(1.35)	2(0.01)	
Water only	49(59.76)	56(65.88)	43(58.11)	148(61.41)	

Figures in parentheses indicate percentages

NS = Non significant

washed their hands before and after meals while 15.33 per cent of the respondents washed their hands every time before and after meals. The negligence of the respondents regarding washing their hands could also be a source of carrying germs which may ultimately lead to illness and infections. During data collection effort was made to know whether the respondents washed their hands after defecation and it was found that they kept mum indicating their casual attitude towards washing hands.

The table further shows that what they use to wash their hands.

The majority of the respondents, i.e., 61.41 washed their hands with water

only but this does not get them rid of harmful substances or germs which may cause infections and illness. A little above 35 per cent of the respondents washed their hands with soap. Only 2.49 per cent of the respondents washed their hands with ash while 0.01 per cent washed their hands with sand as they could not afford to use soap with no respondent in district-II, i.e., Bathinda who washed their hands with sand. There was no significant difference as regards whether the respondents wash their hands before and after meals and what they use to wash their hands.

4.3.7 Visiting the *babas* for cure of diseases

Numerous indications from the various scientific and literary writings are there which indicate that rural population quite often visit the *babas* for treatment which many a time proved detrimental for the health.

Table 4.3.7 Distribution of respondents according to whether they go to *babas* for cure of diseases

Whether they go to <i>babas</i> for cure of diseases	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	36(36.00)	43(43.00)	49(49.00)	128(42.67)	3.46 ^{NS}
No	64(64.00)	57(57.00)	51(51.00)	172(57.33)	

Figures in parentheses indicate percentages

NS = Non significant

Whether people of area under study go to *babas*? This issue was probed and the data presented in Table 4.3.7 shows that almost 43 per cent of the respondents told that they went to *babas* for cure of diseases with maximum number of respondents in district - III, i.e., Amritsar. The rest of the

respondents told that they did not go to *babas* in case of any health problem. There was no significant difference between the districts in relation to whether the respondents go to *babas* for cure of diseases.

4.3.8 Treatment given by the *babas* for the cure of health problems

The information regarding the treatment given by the *babas* for the cure of health problems is presented in Table 4.3.8. The table shows that almost half of the respondents (50.78%) who went to the *babas* told that they

Table 4.3.8 Distribution of respondents according to treatment given by the *babas* for the cure of health problems

Treatment given by the <i>babas</i>	Ludhiana (n=36)	Bathinda (n=43)	Amritsar (n=49)	G. Total (n=128)
Give oral pills	5(13.89)	9(20.93)	13(26.53)	27(21.09)
Give ash	8(22.22)	4(9.30)	10(20.41)	22(17.19)
Give some thread/ <i>taveet</i>	15(41.67)	23(53.49)	27(55.10)	65(50.78)
Ask you to make some <i>daan</i>	20(55.55)	14(32.56)	24(48.98)	58(45.31)
Put their hand on your head	12(33.33)	16(37.21)	8(16.33)	36(28.12)
Enchant some mantras	2(5.55)	5(11.63)	7(14.28)	14(10.94)
Massage treatment	6(16.67)	3(6.98)	9(18.37)	18(14.06)

Figures in parentheses indicate percentages

Multiple response

were given some thread/*taveet* by the *babas* followed by 45.31 per cent of the respondents whom the *babas* asked to make some *daan* for the cure of health problems. Further 28.12 per cent of the respondents told that these *babas* put their hand on their head and blessed them to protect from ill-

health while 21.09 per cent of the respondents were given oral pills, 17.19 per cent of the respondents were given ash for the treatment of health problems. A little above 14 per cent (14.06%) respondents told that they were given some massage treatment while in case of almost 11 per cent of the respondents these *babas* enchanted some mantras for the treatment of their health problems.

4.3.9 Cure of diseases after going to *babas*

The Table 4.3.9 reveals the information regarding whether going to the *babas* have cured the respondents from diseases. The table

Table 4.3.9 Distribution of respondents according to whether going to the *babas* have cured them from diseases

Going to the <i>babas</i> have cured them from diseases	Ludhiana (n=36)	Bathinda (n=43)	Amritsar (n=49)	G. Total (n=128)	χ^2 value
Yes	22(61.11)	27(62.79)	34(69.39)	83(64.84)	0.74 ^{NS}
No	14(38.89)	16(37.21)	15(30.61)	45(35.16)	

Figures in parentheses indicate percentages

NS = Non significant

shows that 64.84 per cent of the respondents told that going to the *babas* have somewhat cured them from diseases which shows the illiteracy and the superstitious nature of the respondents who still believe in these *babas* who mostly cheat the people and exploit them. Almost 35 per cent of the respondents told that they went to these *babas* for cure of diseases but they didnot get rid of their health problem even after going to these *babas* and following their instructions for cure of their diseases. There was no

significant difference between the districts as regards whether going to *babas* have cured the respondents from diseases.

4.3.10 Number of unqualified doctors/quacks in the village

The information regarding the number of unqualified doctors or quacks in the village is given in Table 4.3.10. The table reveals that almost 40 per cent of the respondents, i.e., 39.67 per cent told that there were 6-8

Table 4.3.10 Distribution of respondents according to number of unqualified doctors/quacks in their village

Number of unqualified doctors/quacks in their village	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Upto 4	-	5(5.00)	-	5(1.67)	27.11**
4-6	36(36.00)	40(40.00)	30(30.00)	106(35.33)	
6-8	49(49.00)	37(37.00)	33(33.00)	119(39.67)	
8 and above	15(15.00)	18(18.00)	37(37.00)	70(23.33)	

Figures in parentheses indicate percentages

** Significant at 1% level

unqualified doctors or quacks in the village followed by 35.33 per cent of the respondents who told that their number was 4-6. Twenty three per cent of the respondents told that there were more than 8 quacks or unqualified doctors in their village with 1.67 per cent respondents telling that there were less than 4 quacks or unqualified doctors in their village. The presence of these quacks or unqualified doctors inspite of the government health set-up shows the negligence of health authorities as some health officials during the

data collection revealed that they sent the names of these unqualified doctors or quacks to the higher authorities for action but in vain. The difference between the districts as regards the number of unqualified doctors or quacks in the village was highly significant. The overall data indicates the widespread presence of quacks in the rural areas.

4.3.11 Taking medicines from unqualified doctors or quacks

The Table 4.3.11 shows the distribution of respondents according to whether they take medicines from unqualified doctors or quacks. The table reveals that 32.33 per cent respondents admitted that they took medicines from these unqualified doctors or quacks while the rest 67.67 per cent respondents said 'No' in this regard. The difference between the districts as regards whether they take treatment from unqualified doctors or quacks is significant. Though efforts were made to garner the information regarding whether respondents take medicines from quacks but the respondents were somewhat hesitant to divulge information in this regard.

The table further shows the various reasons for taking medicines from these unqualified doctors or quacks. A little more than 50 per cent (51.54%) respondents told that these unqualified doctors are always available in the village followed by 44.33 per cent respondents who gave the reason that low cost medicines are provided by these doctors thus being ignorant of the fact that the medicines provided by them were sub-standard and of low quality. The other reasons given by the respondents for taking

Table 4.3.11 Distribution of respondents according to whether they take medicines from unqualified doctors/quacks and the reasons for taking medicines from them

Whether take medicines from unqualified doctors or quacks	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	29(29.00)	42(42.00)	26(26.00)	97(32.33)	6.61*
No	71(71.00)	58(58.00)	74(74.00)	203(67.67)	

Reasons for taking medicines from unqualified doctors/quacks	Ludhiana (n=29)	Bathinda (n=42)	Amritsar (n=26)	G. Total (n=97)
Always available in the village	13(44.83)	27(64.28)	10(38.46)	50(51.54)
Near home (easily accessible)	8(27.59)	12(28.57)	9(34.61)	29(29.90)
Provide low cost medicines	9(31.03)	21(50.00)	13(50.00)	43(44.33)
Doctor known	6(20.69)	9(21.43)	3(11.54)	18(18.56)
Satisfactory treatment	8(27.59)	17(40.48)	11(42.31)	36(37.11)
In case of minor health problems	3(10.34)	9(21.43)	4(15.38)	16(16.49)

Figures in parentheses indicate percentages

Multiple response

* Significant at 5% level

treatment from the unqualified doctors or quacks include satisfactory treatment provided by them (37.11%), near home (29.90%), doctor personally known to the respondents (18.56%) while 16.49 per cent respondents told that they consulted these unqualified doctors or quacks in case of minor health problems.

4.3.12 Time of going for treatment during illness

The data with regard to when the respondents go for treatment during illness is presented in Table 4.3.12. The table reveals that 38.67 per cent respondents told that they wait and see before going for treatment during illness with a major proportion of respondents from district - III, i.e., Amritsar. This was followed by one-third of the respondents who told that they go for treatment when it starts affecting day to day work. A comparatively less number of respondents, i.e., 14.33 per cent went for treatment immediately while 13.67 per cent respondents kept on waiting and went for treatment only when they became incapable and were not able to work any more. This table shows the negligence of respondents towards health problems thus increasing the extent of loss suffered due to ill-health

Table 4.3.12 Distribution of respondents according to when they go for treatment during illness

When they go for treatment during illness	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Immediately	18(18.00)	15(15.00)	10(10.00)	43(14.33)	9.90 ^{NS}
Wait and see	35(35.00)	32(32.00)	49(49.00)	116(38.67)	
When it starts affecting day to day work	32(32.00)	41(41.00)	27(27.00)	100(33.33)	
When you become incapable	15(15.00)	12(12.00)	14(14.00)	41(13.67)	

Figures in parentheses indicate percentages

NS = Non significant

both physically and monetarily. There was no significant difference between the districts as regards when the respondents go for treatment during illness.

4.3.13 Home remedies followed in case of disease or illness

The home remedies are almost found in every society depending on their environmental and topographical conditions and in this study efforts were made to know as to whether people follow home remedies or not. The data in this regard is presented in table 4.3.13 which shows that 78.00 per cent of the respondents ate some home-made products of medicinal plants in case of disease or illness while 56.33 per cent of the respondents told that they applied *haldi* in case of injury or wounds. The other home remedies followed were eating some *Ajwain* or *Saunf* (34.33%),

Table 4.3.13 Distribution of respondents according to home remedies followed in case of disease or illness

Home remedies followed in case of disease or illness	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)
Eat some home-made products of medicinal plants	79(79.00)	81(81.00)	74(74.00)	234(78.00)
Drink some <i>desi</i> tea	16(16.00)	24(24.00)	18(18.00)	58(19.33)
Drink some <i>desi</i> ghee with <i>besan</i> in milk	34(34.00)	22(22.00)	28(28.00)	84(28.00)
Eat some <i>Ajwain</i> / <i>Saunf</i>	28(28.00)	34(34.00)	41(41.00)	103(34.33)
Apply <i>haldi</i> in case of injury or wounds	58(58.00)	63(63.00)	48(48.00)	169(56.33)

Figures in parentheses indicate percentages
Multiple response

drinking some *desi* ghee with *besan* in milk (28.00%) while 19.33 per cent respondents drank some *desi* tea in case of illness.

4.4 CORRELATION AMONG SOCIAL FACTORS AND HEALTH ASPECTS

The correlation among the social factors and health aspects was studied and the data in this regard is presented in the forthcoming tables.

4.4.1 Relationship between respondent's socio-economic characteristics and whether going for regular health checkup

Table 4.4.1 shows the relationship between respondent's socio-economic characteristics and whether they go for regular health check-up. The data depicts highly significant positive relationship between the age of

Table 4.4.1 Relationship between respondent's socio-economic characteristics and whether going for regular health checkup

Sr. No	Socio-economic characteristics	r-value
1	Age	0.2980**
2	Family size	0.1278 ^{NS}
3	Education level	0.2343*

* Significant at 5 per cent level

** Significant at 1 per cent level

NS = Non significant

the respondents and whether they go for regular health check-up. The respondents going for regular health check-up was also positively correlated with the education level of the respondents indicating that the older and highly educated respondents go for regular health check up. However family

size didnot influence whether the respondents went for regular health check-up.

4.4.2 Relationship between respondent's socio-economic characteristics and number of times visited government health centre

The Table 4.4.2 reveals the relationship between respondent's socio-economic characteristics and number of times they visited the government health centre. The table indicates that old aged respondents visited the government health centre more times. However, there was no

Table 4.4.2 Relationship between respondent's socio-economic characteristics and number of times visited government health centre

Sr. No	Socio-economic characteristics	r-value
1	Age	0.2068*
2	Family size	0.0874 ^{NS}
3	Education level	-0.0347 ^{NS}

* Significant at 5 per cent level

NS = Non significant

significant relationship of number of times the respondents visited the government health centre with other socio-economic characteristics like family size and education.

4.4.3 Relationship between respondent's socio-economic characteristics and whether going to *babas* for cure of diseases

The data in Table 4.4.3 depicts negative association between education level of the respondents with whether going to *babas* have cured the respondents from diseases. It indicates that respondents of with higher

Table 4.4.3 Relationship between respondent's socio-economic characteristics and whether going to *babas* for cure of diseases

Sr. No	Socio-economic characteristics	r-value
1	Age	-0.0049 ^{NS}
2	Family size	-0.0422 ^{NS}
3	Education level	-0.2630**

** Significant at 1 per cent level

NS = Non significant

education level didnot go to the *babas* for cure of diseases. There was no relationship with other socio-economic characteristics like age and family size.

4.4.4 Relationship between respondent's socio-economic characteristics and whether the respondents take medicines from unqualified doctors or quacks

The data presented in Table 4.4.4 shows negative relationship between education level with whether the respondents take medicines from

Table 4.4.4 Relationship between respondent's socio-economic characteristics and whether the respondents take medicines from unqualified doctors or quacks

Sr. No	Socio-economic characteristics	r-value
1	Age	-0.0064 ^{NS}
2	Family size	0.0006 ^{NS}
3	Education level	-0.2493*

* Significant at 5 per cent level

NS = Non significant

unqualified doctors or quacks. It is indicative less educated respondents take medicines from unqualified doctors or quacks. However the other socio-economic factors had no influence on whether the respondents take medicines from unqualified doctors or quacks.

4.5 SOCIO-ECONOMIC IMPLICATIONS OF HEALTH PROBLEMS

The health problems cast definite impact on the socio-economic and psychological life of individual as well as the family. So to have an idea regarding the impact of health problems in the life and family of the respondents, an effort was made and the information gathered is discussed in the following tables.

4.5.1 Economic consequences of health problems

Table 4.5.1 reveals the distribution of economic consequences of health problems. The table shows that majority of the respondents, i.e., 72.67 per cent told that their health problems do have certain economic consequences. District wise the maximum number of respondents were from District-II, i.e., Bathinda. There was no significant difference between the districts as regards whether the respondents face any economic problem due to ill-health.

The table further shows the various economic consequences of health problems. It reveals that majority of the respondents (55.04%) suffered economically due to more expenditure on medicines followed by

Table 4.5.1 Distribution of respondents according to the economic consequences of health problems

Does your health problem have any economic consequences	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	72(72.00)	79(79.00)	67(67.00)	218(72.67)	3.66 ^{NS}
No	28(28.00)	21(21.00)	33(33.00)	82(27.33)	

Economic consequences of health problems	Ludhiana (n=72)	Bathinda (n=79)	Amritsar (n=67)	G. Total (n=218)
Decrease in income	16(22.22)	19(24.05)	18(26.86)	53(24.31)
Economic instability	29(40.28)	34(43.04)	21(31.34)	84(38.53)
More expenditure on medicines	39(54.17)	48(60.76)	33(49.25)	120(55.04)
More expenditure on treatment	32(44.44)	39(49.37)	40(59.70)	111(50.92)
Inadequate income to spend on prescribed diet	12(16.67)	15(18.99)	14(20.89)	41(18.81)
Indebtedness due to loan taken for medical purposes	8(11.11)	11(13.92)	5(7.46)	24(11.01)
Not able to spend adequate amount on social ceremonies	8(11.11)	5(6.33)	9(13.43)	22(10.09)

Figures in parentheses indicate percentages

Multiple response

NS = Non significant

50.92 per cent respondents who gave the reason as more expenditure on treatment. Almost 40 per cent of the respondents suffered from economic instability due to health problems while 24.31 per cent respondents reported decrease in income due to health problems may due to loss of work, missing of work, inefficiency to carry out day to day work effectively etc. The other economic consequences of health problems mentioned by the respondents

were inadequate income to spend on prescribed diet (18.81%), indebtedness due to loan taken for medical purposes (11.01%) and not able to spend adequate amount on social ceremonies (10.09%).

4.5.2 Problems faced in meeting the daily expenditure of family due to ill-health

An effort was made to identify the problems faced in meeting the daily expenditure of family due to ill-health and the data in this regard is presented in Table 4.5.2. Out of the total 23.67 per cent respondents faced

Table 4.5.2 Distribution of respondents according to whether they face any problem in meeting the daily expenditure of their family due to ill-health

Face any problem in meeting the daily expenditure	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	19(19.00)	24(24.00)	28(28.00)	71(23.67)	2.25 ^{NS}
No	81(81.00)	76(76.00)	72(72.00)	229(76.33)	

Problems faced in meeting the daily expenditure	Ludhiana (n=19)	Bathinda (n=24)	Amritsar (n=28)	G. Total (n=71)
Inadequate income to spend on food	5(26.31)	9(37.5)	12(42.86)	26(36.62)
Inability to provide good education	13(68.42)	14(58.33)	17(60.71)	44(61.97)
Inadequate amount to spend on health of family members	4(21.05)	7(29.17)	2(7.14)	13(18.31)
Inability to provide good clothing	1(5.26)	3(12.5)	-	4(5.63)

Figures in parentheses indicate percentages

Multiple response

NS = Non significant

problem in meeting the daily expenditure. Almost 60 per cent of the respondents faced the problem of inability to provide good education to children with maximum respondents from District-I, i.e., Ludhiana. The rest told that they faced problems like inadequate income to spend on food (36.62%) and inadequate amount to spend on health of family members (18.31%) while 5.63 per cent faced the problem of inability to provide good clothing. There was no significant difference as regards whether the respondents faced any problem in daily expenditure.

4.5.3 Deterioration of inter-personal relations with family members due to ill-health

Table 4.5.3 shows the distribution of respondents according to whether they feel that their inter-personal relations with family members have deteriorated due to ill-health. The table reveals that only 27.33 per cent of the respondents said that their interpersonal relations have deteriorated while 72.67 per cent said 'No' in this regard. Out of the total respondents 68.29 per cent respondents complained of lack of care from family members followed by 52.44 per cent respondents who told that there was increase in quarrels with maximum respondents in both categories from District I, i.e., Ludhiana. Almost 40 per cent of the respondents told that their family members showed irritable behaviour towards them due to their ill-health while 15.85 per cent respondents told that their family members shouted at them sometimes due to their ill-health inspite of no fault of theirs showing the lack of concern for the patients suffering by their own family

Table 4.5.3 Distribution of respondents according to whether they feel that their inter-personal relations with family members have deteriorated due to ill-health

Interpersonal relations with family members have deteriorated	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	24(24.00)	27(27.00)	31(31.00)	82(27.33)	1.24 ^{NS}
No	76(76.00)	73(73.00)	69(69.00)	218(72.67)	

How the relations have deteriorated	Ludhiana (n=24)	Bathinda (n=27)	Amritsar (n=31)	G. Total (n=82)
Increase in quarrels	14(58.33)	12(44.44)	17(54.84)	43(52.44)
Shouting at them	2(8.33)	4(14.81)	7(22.58)	13(15.85)
Lack of care from family members	17(70.83)	18(66.67)	21(67.74)	56(68.29)
Irritability of family members	11(45.83)	9(33.33)	14(45.16)	34(41.46)

Figures in parentheses indicate percentages

Multiple response

NS = Non significant

members. They were not in a position to participate in family and community life. There was no significant difference between the districts as regards whether the inter-personal relations have deteriorated.

4.5.4 Person who cares for the respondents during ill-health

The Table 4.5.4 depicts the information regarding the person who cares for the respondents during ill-health. The maximum, i.e., 70.33 per cent respondents told that they were taken care of by their spouse during ill-health. The table shows that 46.00 per cent of the respondents told that

Table 4.5.4 Distribution of respondents according to the person who cares for them during ill-health

Person who cares for them during ill-health	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)
Spouse	71(71.00)	63(63.00)	77(77.00)	211(70.33)
Son	23(23.00)	29(29.00)	20(20.00)	72(24.00)
Daughter	39(39.00)	40(40.00)	48(48.00)	127(42.33)
Daughter-in-law	51(51.00)	41(41.00)	46(46.00)	138(46.00)
Grand children	18(18.00)	23(23.00)	23(23.00)	64(21.33)
Any other	2(2.00)	7(7.00)	11(11.00)	20(6.67)

Figures in parentheses indicate percentages

Multiple response

they were cared by their daughter-in-law followed by 42.33 per cent respondents who were cared for by their daughter. The other people who cared for them during ill-health included their son (24.00%), grand children (21.33%) and others like relatives, friends etc. in case of 6.67 per cent respondents.

4.5.5 Ill-health of respondents and problems of family members

Table 4.5.5 reveals that distribution of respondent's on the basis of whether their family members faced any problem due to their ill-health. The table shows that 31.00 per cent of the respondents admitted that their family members do face various problems due to their ill-health. As regards the problems faced by the family members in case of 63.44 per cent respondents the problem faced was regular care of patient followed by 52.69

Table 4.5.5 Distribution of respondents according to whether their family members face any problem due to their ill-health

Face any problem due to their ill-health	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	27(27.00)	31(31.00)	35(35.00)	93(31.00)	1.50 ^{NS}
No	73(73.00)	69(69.00)	65(65.00)	207(69.00)	

Problems faced by family members due to ill-health of patient	Ludhiana (n=27)	Bathinda (n=31)	Amritsar (n=35)	G. Total (n=93)
Depression due to continuous illness	6(22.22)	7(25.81)	12(34.28)	25(26.88)
Have to accompany the patient	17(62.96)	20(64.52)	12(34.28)	49(52.69)
Regular care of patient	17(62.96)	19(61.29)	23(65.71)	59(63.44)
Fear of contracting disease	3(11.11)	19(61.29)	8(22.86)	30(32.26)
Time is wasted	16(59.26)	11(35.48)	14(40.00)	41(44.09)

Figures in parentheses indicate percentages

Multiple response

NS = Non significant

per cent respondents who told that their family members have to accompany them for medication and treatment. The other problems faced by family members included wastage of time (44.09%), fear of contracting disease (32.26%) while 26.88 per cent faced the problem of depression due to continuous illness showing the effect of ill-health of the respondents on the psychological state of the family as well. There was no significant difference between the districts as regards whether the family members of respondents faced any problem due to their ill-health.

4.5.6 Effect on physical well-being of patient

The ill-health whether minor or severe do have certain effect on general physical well-being of patient which is depicted in Table 4.5.6. The table shows that all the respondents told that the ill-health do has certain effect on their physical well being.

Table 4.5.6 Distribution of respondents according to whether their ill-health has any effect on the physical well-being of the patient

Whether ill-health has any effect on physical well-being of patient	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)
Yes	100(100.00)	100(100.00)	100(100.00)	300(100.00)
No	-	-	-	-

Effect on physical well-being of patient	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)
Tiredness	35(35.00)	48(48.00)	38(38.00)	121(40.33)
Inefficiency to work	47(47.00)	43(43.00)	36(36.00)	126(42.00)
Loss of weight	15(15.00)	20(20.00)	24(24.00)	59(19.67)
Decrease in eyesight	21(21.00)	26(26.00)	30(30.00)	77(25.67)
Hearing problems	6(6.00)	10(10.00)	9(9.00)	25(8.33)
Headache	27(27.00)	22(22.00)	33(33.00)	82(27.33)
Nausea	11(11.00)	8(8.00)	12(12.00)	31(10.33)
Vomitting	13(13.00)	4(4.00)	11(11.00)	28(9.33)
High blood pressure	28(28.00)	33(33.00)	34(34.00)	95(31.67)
Loss of appetite	15(15.00)	13(13.00)	14(14.00)	42(14.00)

Figures in parentheses indicate percentages

Multiple response

The table further shows the various effects on the physical well-being of the patient. Almost 40 per cent of the respondents each complained of inefficiency to work (42.00%) and tiredness (40.33%). Further 31.67 per cent respondents complained of high blood pressure followed by 27.33 per cent respondents who complained of headache and decrease in eyesight (25.67%). The other effects on physical well-being of patient included loss weight (19.67%), loss of appetite (14.00%), nausea (10.33%), vomiting (9.33%) while 8.33 per cent respondents told about hearing problems due to their ill-health. During data collection some respondents told that due to medication and treatment of the disease they were suffering from they tend to suffer from certain side effects of the medicines.

4.5.7 Effect on psychological well-being of patient

The ill-health also has certain effect on psychological well-being of the patient and the data in this regard is presented in Table 4.5.7. The table shows that more than 50 per cent of the respondents, i.e., 53.67 per cent told that the ill-health has certain effect on the psychological well being of the patient. There was no significant difference between the districts as regards whether ill-health has any effect on psychological well-being of the patients.

The table reveals the various effects on the psychological well-being of the patient. The majority, i.e., 44.72 per cent told that their behaviour have become more irritable. Further 27.95 per cent respondents

Table 4.5.7 Distribution of respondents according to whether the ill-health has any effect on the psychological well-being of the patient

Whether ill-health has any effect on the psychological well-being of patient	Ludhiana (n=100)	Bathinda (n=100)	Amritsar (n=100)	G. Total (n=300)	χ^2 value
Yes	59(59.00)	53(53.00)	49(49.00)	161(53.67)	2.04 ^{NS}
No	41(41.00)	47(47.00)	51(51.00)	139(46.33)	

Effect on psychological well-being of patient	Ludhiana (n=59)	Bathinda (n=53)	Amritsar (n=49)	G. Total (n=161)
Frustration	9(15.25)	5(9.43)	7(14.28)	21(13.04)
Depression	9(15.25)	4(7.55)	3(6.12)	16(9.94)
Irritability	33(55.93)	24(45.28)	15(30.61)	72(44.72)
Frequent quarrelling with family members	19(32.20)	17(32.07)	9(18.37)	45(27.95)
Mental tension	15(25.42)	13(24.53)	12(24.49)	40(24.84)
Decrease in concentration	9(15.25)	15(28.30)	13(26.53)	37(22.98)
Lack of interest in talking with people (interaction)	13(22.03)	10(18.87)	9(18.37)	32(19.87)

Figures in parentheses indicate percentages

Multiple response

NS = Non significant

reported of frequent quarrelling with family members followed by 24.84 per cent respondents who told that they suffered from mental tension due to ill-health while 22.98 per cent respondents told about decrease in concentration. The other effects on psychological well-being of the patient included lack of interest in taking with people (19.87%), frustration (13.04%) and depression (9.94%).

4.6 INFORMATION FROM HEALTH PERSONNEL REGARDING THE HEALTH SET-UP

Besides the respondents the health officials working in the area of study were also contacted to know about the availability of facilities and general health set-up, so the information collected is discussed in the following tables.

4.6.1 Socio-economic profile of health personnel

Table 4.6.1 reveals the information regarding socio-economic characteristics of the health personnel. The table shows that almost 45 per cent of the respondents were in the age group of 30-40 years followed by

Table 4.6.1 Socio-economic profile of health personnel

Socio-economic characteristics	Ludhiana (n=8)	Bathinda (n=8)	Amritsar (n=8)	G. Total (n=24)	χ^2 value
Age					
Upto 30	2(25.00)	3(37.50)	2(25.00)	7(29.17)	1.46 ^{NS}
30-40	3(37.50)	4(50.00)	4(50.00)	11(45.83)	
40 and above	3(37.50)	1(12.50)	2(25.00)	6(25.00)	
Sex					
Male	6(75.00)	5(62.50)	6(75.00)	17(70.83)	0.40 ^{NS}
Female	2(25.00)	3(37.50)	2(25.00)	7(29.17)	
Qualification					
M.B.B.S.	3(37.50)	-	4(50.00)	7(29.17)	7.73 ^{NS}
One year diploma	1(12.50)	-	-	1(4.17)	
One and a half year diploma	2(25.00)	4(50.00)	2(25.00)	8(33.33)	
Two year diploma	2(25.00)	4(50.00)	2(25.00)	8(33.33)	

Figures in parentheses indicate percentages

NS = Non significant

29.17 per cent and 25.00 per cent of the respondents who were in the age groups of upto 30 and 40 and above respectively. As regards sex of health personnel majority, i.e., 70.83 per cent were males while 29.17 per cent were females. One-third of the respondents each had done diploma of one and a half years and 2 years diploma. Almost 30 per cent had done M.B.B.S. degree and were doctors. Only one respondent had done one year diploma and was a laboratory technician. There was no significant difference between the districts as regards the age, sex and qualification of the respondents.

4.6.2 Number of doctors and related health officials in the health centres

Table 4.6.2 reveals that data regarding the number of doctors and related health officials in the health centres. In case of only one health

Table 4.6.2 Distribution according to the number of doctors and related health officials in the health centre

Number of doctors and related health officials	Ludhiana (n=4)	Bathinda (n=4)	Amritsar (n=4)	G. Total (n=12)	χ^2 value
One	-	1(25.00)	-	1(8.33)	9.36 ^{NS}
Two	-	1(25.00)	-	1(8.33)	
Three	1(25.00)	2(50.00)	1(25.00)	4(33.33)	
Four	2(50.00)	-	3(75.00)	5(41.67)	
More than 4	1(25.00)	-		1(8.33)	

Figures in parentheses indicate percentages

NS = Non significant

centre the number of doctors and health officials was more than four. Further the data shows that the number of doctors and related health officials in the health centre were four in 41.67 per cent of the health centres followed by 33.33 per cent of the health centres where the number of doctors and related health officials was three. The number of doctors and related health officials was one and two in case of one health centre each. There was no significant difference between the districts as regards the number of doctors and related health officials in the health centre.

4.6.3 Staff positions of health officials in the health centre

The information regarding the staff positions of health officials in the health centre is presented in Table 4.6.3. The table shows that there was a pharmacist in all the twelve health centres visited followed by the

Table 4.6.3 Distribution according to staff positions of health officials in the health centre

Staff positions of health officials	Ludhiana (n=4)	Bathinda (n=4)	Amritsar (n=4)	G. Total (n=12)
Doctor	3(75.00)	-	4(100.00)	7(58.33)
Pharmacist	4(100.00)	4(100.00)	4(100.00)	12(100.00)
MPHW (Male)	3(75.00)	2(50.00)	3(75.00)	8(66.67)
MPHW (Female)	4(100.00)	3(75.00)	4(100.00)	11(91.67)
ANM	2(50.00)	-	-	2(16.67)
Lab Technician	1(25.00)	-	-	1(8.33)

Figures in parentheses indicate percentages
Multiple response

Multipurpose Health Worker (Female) who were available in 91.67 per cent of the health centres. The table further shows that in case of 66.67 per cent of the health centres Multipurpose Health Worker (Male) was there in the health centre while in 58.33 per cent of the health centres doctor was there. The Auxiliary Nurse Midwife (ANM) was available in case of 2 centres and in one centre only there was a lab technician. The overall data shows the inadequacy of the trained medical professionals (doctors, laboratory technicians). Interestingly not even a single doctor was found appointed in the study area of Bathinda district.

4.6.4 Adequacy of staff appointed by the government in the health centre

Table 4.6.4 shows the data regarding whether the staff appointed by the government in the health centre adequate. The table shows that 58.33 per cent of the respondents told that the staff appointed by the government was not adequate while 41.67 per cent of the respondents gave a positive response in this regard. The difference between the districts as regards whether the health staff in the health centre was adequate was highly significant.

The table further shows the reasons for inadequacy of staff. Almost 70 per cent of the respondents told that doctor was not available in the health centre followed by 64.28 per cent of the health personnel who told that there was no new appointment of health staff and no technician for

Table 4.6.4 Distribution of respondents according to whether the staff appointed by the government in the health centre adequate

Staff appointed in the health centre adequate	Ludhiana (n=8)	Bathinda (n=8)	Amritsar (n=8)	G. Total (n=24)	χ^2 value
Yes	4(50.00)	-	6(75.00)	10(41.67)	9.60**
No	4(50.00)	8(100.00)	2(25.00)	14(58.33)	

Reasons for inadequacy of staff	Ludhiana (n=4)	Bathinda (n=8)	Amritsar (n=2)	G. Total (n=14)
No new appointment of health staff	4(100.00)	3(37.50)	2(100.00)	9(64.28)
Doctor not available	2(50.00)	8(100.00)	-	10(71.43)
Less staff for the population covered	-	3(37.50)	1(50.00)	4(28.57)
No specialists are there	2(50.00)	-	-	2(14.28)
No technician for laboratory	4(100.00)	4(50.00)	1(50.00)	9(64.28)

Figures in parentheses indicate percentages

Multiple response

** Significant at 1% level

laboratory. Almost 30 per cent of the respondents told that there was less staff for the population covered by each health centre while 14.28 per cent of the respondents complained that there were no specialists in the health centre. The overall data indicates that health staff of various levels is quite inadequate to cater to the needs of the rural residents.

4.6.5 Number of rooms in the health centre

The information as regards the number of rooms in the health centre is presented in Table 4.6.5. The table reveals that there was only one health centre where the number of rooms was more than four while in case

Table 4.6.5 Distribution according to number of rooms in the health centre

Number of rooms in the health centre	Ludhiana (n=4)	Bathinda (n=4)	Amritsar (n=4)	G. Total (n=12)	χ^2 value
Two	1(25.00)	2(50.00)	2(50.00)	5(41.67)	3.91 ^{NS}
Three	2(50.00)	1(25.00)	1(25.00)	4(33.33)	
Four	-	1(25.00)	1(25.00)	2(16.67)	
More than 4	1(25.00)	-	-	1(8.33)	

Figures in parentheses indicate percentages

NS = Non significant

of 41.67 per cent of the health centres the number of rooms was two. Further in one-third, i.e., 33.33 per cent of the health centres the number of rooms was three followed by 16.67 per cent of health centres where there were four rooms. There was no significant different between the districts in relation to number of rooms in the health centre.

4.6.6 Status of the building of the health centre

Table 4.6.6 shows the status of the building of the health centre. The table reveals that only one-third, i.e., 33.33 per cent of the respondents told that the building of the health centre is proper while the rest said 'No' in this regard. There was no significant difference between the districts as regards whether the building of health centre was proper.

The table further shows the reasons for improper building of the health centre. Three-fourth of respondents each, i.e., 75.00 per cent told that there was no proper toilet facility and building was semi-structured. More than 50 per cent of the respondents told that there were less number of

Table 4.6.6 Distribution of respondents according to whether the building of the health centre proper

Building of health centre proper	Ludhiana (n=8)	Bathinda (n=8)	Amritsar (n=8)	G. Total (n=24)	χ^2 value
Yes	4(50.00)	2(25.00)	2(25.00)	8(33.33)	1.50 ^{NS}
No	4(50.00)	6(75.00)	6(75.00)	16(66.67)	

Reasons for improper building of health centre	Ludhiana (n=4)	Bathinda (n=6)	Amritsar (n=6)	G. Total (n=16)
Semi-structured building	3(75.00)	4(66.67)	5(83.33)	12(75.00)
No cleanliness in the building	1(25.00)	-	-	1(6.25)
No facility for patients and related staff to sit	3(75.00)	2(33.33)	2(33.33)	7(43.75)
No proper toilet facility	1(25.00)	5(83.33)	6(100.00)	12(75.00)
Less number of rooms	2(50.00)	2(33.33)	5(83.33)	9(56.25)
No proper arrangement of water supply and electricity	2(50.00)	4(66.67)	2(33.33)	8(50.00)

Figures in parentheses indicate percentages

Multiple response

NS = Non significant

rooms in the health centre while 50 per cent of the respondents told that there was no proper arrangement of water supply and electricity. In case of 43.75 per cent of the respondents the reason was no facility for patients and related staff to sit. There was only one respondent who mentioned about the lack of cleanliness in the building. This table shows the lack of basic infrastructure indicating the deplorable condition of the health set-up.

4.6.7 Adequacy of facilities in health centre

The data in table 4.6.7 indicates that whether the facilities like

beds, medicines etc. were adequate in the health centre. All the respondents told that the facilities were inadequate.

Table 4.6.7 Distribution of respondents according to whether the facilities like beds, medicines etc. adequate

Whether the facilities adequate	Ludhiana (n=8)	Bathinda (n=8)	Amritsar (n=8)	G. Total (n=24)
Yes	-	-	-	-
No	8(100.00)	8(100.00)	8(100.00)	24(100.00)

Reasons for inadequacy of facilities in health centre	Ludhiana (n=8)	Bathinda (n=8)	Amritsar (n=8)	G. Total (n=24)
Rare medicine supply by government	6(75.00)	4(50.00)	3(37.50)	13(54.17)
Medicines are outdated	3(37.50)	6(75.00)	7(87.50)	16(66.67)
Less number of beds	2(25.00)	2(25.00)	2(25.00)	6(25.00)
Beds are not available	5(62.50)	5(62.50)	4(50.00)	14(58.33)
No proper diagnostic equipment	5(62.50)	3(37.50)	4(50.00)	12(50.00)

Figures in parentheses indicate percentages
Multiple response

As regards the reasons for inadequacy of facilities almost 67 per cent of the respondents told that the medicines were outdated followed by 58.33 per cent of the respondents who told that beds are not available while 54.17 per cent of the respondents told that medicine supply by the government was rare. Half of the respondents told that there was no proper diagnostic equipment while 25.00 per cent of the respondents told that there were less number of beds.

4.6.8 Availability of laboratory testing facilities in the health centre

Table 4.6.8 shows that whether there were laboratory testing facilities in the health centre. Only one health centre had laboratory testing facilities while in the rest there were no laboratory testing facilities nor a

Table 4.6.8 Distribution according to whether there are laboratory testing facilities in the health centre

Whether laboratory testing facilities are there	Ludhiana (n=4)	Bathinda (n=4)	Amritsar (n=4)	G. Total (n=12)	χ^2 value
Yes	1(25.00)	-	-	1(8.33)	2.20 ^{NS}
No	3(75.00)	4(100.00)	4(100.00)	11(91.67)	

Figures in parentheses indicate percentages

NS = Non significant

laboratory technician. There was no significant difference between the districts as regards whether there were laboratory testing facilities in the health centre. The data indicates regarding the non-existence of the basic required laboratory testing facilities.

4.6.9 Number of patients sent to other centres for treatment due to inadequacy of facilities

The information regarding the number of patients to be sent to other centres for treatment due to inadequacy of facilities is presented in Table 4.6.9. The table shows that 41.67 per cent of the respondents told that 10-15 patients are sent to other centres for treatment while 29.17 per cent of the respondents told that more than 15 patients were sent to other centres. One-fourth of the respondents told that 5-10 patients need to be sent to other

Table 4.6.9 Distribution of respondents according to number of patients sent to other centres for treatment due to inadequacy of facilities

Number of patients sent to other centres	Ludhiana (n=8)	Bathinda (n=8)	Amritsar (n=8)	G. Total (n=24)	χ^2 value
Upto 5	1(12.50)	-	-	1(4.17)	14.14*
5-10	5(62.50)	1(12.50)	-	6(25.00)	
10-15	2(25.00)	3(37.50)	5(62.50)	10(41.67)	
15 & above	-	4(50.00)	3(37.50)	7(29.17)	

Figures in parentheses indicate percentages

* Significant at 5% level

centres for treatment due to inadequacy of facilities. Only one respondent told that the number of patients sent to other centres was less than 5. There was significant difference between the districts as regards the number of patients sent to other centres indicating towards the grim picture of availability of health facilities at local level.

4.6.10 Period of year when people are more prone to health problems

Table 4.6.10 reveals that 54.17 per cent of the respondents told that mostly the people are prone to health problems during June-August followed by 33.33 per cent of the respondents who told that people are more prone to health problems during the period of December - February. In case of 12.50 per cent of the respondents people are more prone to health problems during September-November. There was no significant difference between the districts as regards period of year when people are more prone

Table 4.6.10 Distribution of respondents according to period of the year when people are more prone to health problems

Period of the year	Ludhiana (n=8)	Bathinda (n=8)	Amritsar (n=8)	G. Total (n=24)	χ^2 value
June-August	5(62.50)	3(37.50)	5(62.50)	13(54.17)	5.36 ^{NS}
September-November	2(25.00)	-	1(12.50)	3(12.50)	
December-February	1(12.50)	5(62.50)	2(25.00)	8(33.33)	

Figures in parentheses indicate percentages

NS = Non significant

to health problems. The high incidence of diseases during the month of June-August may be attributed towards the harsh and unfriendly weather conditions (hot & wet) supplemented by the negative impact of weedicides and pesticides used in the fields during these months.

4.6.11 Kind of problems faced while treating the patients

The data with regard to kind of problems faced while treating the patients is presented in Table 4.6.11. The table shows that 62.50 per cent of the respondents faced the problem of lack of medicines and other facilities followed by 45.83 per cent of the respondents who faced the problem of irregularity of treatment. Almost 30 per cent of the respondents faced the problem that the patients do not take medicines as prescribed. One-fourth of the respondents faced the problem of lack of knowledge about healthy living while 20.83 per cent of the respondents told that the patients were unable to explain the health problems. Almost 17 per cent of the respondents told that the patients do not take necessary precautions while

Table 4.6.11 Distribution of respondents according to the kind of problems faced while treating the patients

Kind of problems faced	Ludhiana (n=8)	Bathinda (n=8)	Amritsar (n=8)	G. Total (n=24)
Lack of medicines and other facilities	5(62.50)	4(50.00)	6(75.00)	15(62.50)
Irregularity of treatment	2(25.00)	5(62.50)	4(50.00)	11(45.83)
Not take medicines as prescribed	3(37.50)	1(12.50)	3(37.50)	7(29.17)
Donot take necessary precautions	1(12.50)	1(12.50)	2(25.00)	4(16.67)
Unable to explain the health problems	2(25.00)	3(37.50)	-	5(20.83)
Illiteracy	-	2(25.00)	1(12.50)	3(12.50)
Lack of knowledge about healthy living	1(12.50)	3(37.50)	2(25.00)	6(25.00)

Figures in parentheses indicate percentages

Multiple response

12.50 per cent of the respondents told that the illiteracy of the patients was a marked problem.

4.6.12 Suggestions given to improve the health set-up in the government health centre

Table 4.6.12 shows the distribution of respondents according to the suggestions given to improve the health set-up in the government health centre. The table shows that three-fourth the respondents suggested that medicines should be adequate and not outdated followed by 66.67 per cent of the respondents who told that health facilities should be adequate. More than 50 per cent of the respondents told that more doctors and health

Table 4.6.12 Distribution of respondents according to suggestions given to improve the health set-up in the government health centre

Suggestions given to improve the health set-up	Ludhiana (n=8)	Bathinda (n=8)	Amritsar (n=8)	G. Total (n=24)
Medicines should be adequate and not outdated	7(87.50)	5(62.50)	6(75.00)	18(75.00)
Health facilities should be adequate	5(62.50)	6(75.00)	5(62.50)	16(66.67)
Government should provide more funds	1(12.50)	2(25.00)	4(50.00)	7(29.17)
More doctors and health officials should be appointed	4(50.00)	3(37.50)	6(75.00)	13(54.17)
Doctors and health officials should be regular and in time	1(12.50)	-	3(37.50)	4(16.67)
Voluntary organisations should help	3(37.50)	5(62.50)	1(12.50)	9(37.50)
Strict action against quacks	1(12.50)	4(50.00)	2(25.00)	7(29.17)
Better pay for the staff	2(25.00)	-	2(25.00)	4(16.67)
Specialists should visit the health centres	1(12.50)	-	2(25.00)	3(12.50)
Any other	1(12.50)	2(25.00)	-	3(12.50)

Figures in parentheses indicate percentages

Multiple response

officials should be appointed while 37.50 per cent of the respondents told that voluntary organisations should help. Almost 30 per cent of the respondents told that strict action should be taken against quacks and government should provide more funds. An equal number of respondents, i.e., 16.67 per cent told that doctors and health officials should be

regular and in time and better pay should be given to staff. Further 12.50 per cent of the respondents each told that specialists should visit the health centres and gave other suggestions like dedication on the part of health officials, privatisation of medical system.

SUMMARY

Health is an essential component for the development of the individual as well as the society. Good health of the people may be conducive for overall progress whereas the weak population may prove as a hindrance in the progress. The present study was undertaken to study the health problems in rural Punjab and their status, causes and consequences with the following specific objectives :

1. To study the prevalence of diseases in rural areas and facilities available thereof.
2. To study the contributions of various factors leading to rural health care problems.
3. To study the correlation among social factors and health aspects.
4. To bring forth the socio-economic implications of health problems.

This study was conducted in three districts of Punjab state namely Ludhiana, Amritsar and Bathinda selected on the basis of agricultural development and also representing the state. Further, two blocks were chosen from all the selected districts. So there were six blocks in all representing the rural area of the selected districts. Two villages representing the rural area from each selected block of the district were chosen randomly for the study. Thus, the total villages came out to be

twelve. Twenty five respondents who used to visit to the nearest government health centre were selected randomly from the medical record with the help of the concerned health authorities. In all, the total sample consisted of 300 respondents who were suffering from health problems. Besides, two functionaries concerned with the health department from each village were also selected for gathering required information about the health set-up in the villages thus in all 24 health personnel were also contacted for data collection.

The research instrument used in the study was the interview-schedule. Data were collected personally with the help of the structured (with few open-ended questions) and pre-tested interview schedule. After data collection the required scientific procedure for research was followed to arrive at the conclusions. The findings were presented in the five major sub-heads :

- 5.1 Socio-economic characteristics of respondents
- 5.2 Prevalence of diseases in rural areas and facilities available
- 5.3 Factors contributing to rural health problems
- 5.4 Socio-economic implications of health problems
- 5.5 Information from health personnel regarding the health set-up.

Major findings of the study are discussed as under

As regards the socio-economic profile of the respondents the study revealed that majority of the respondents were above 40 years of age

and half of them were males and rest females. Majority (93.00%) of the respondents hailed from the Sikh religion and belonged to the high caste group (76.00%). It was also seen that most of them were living in the nuclear families and nearly half of the respondents (50.33%) having family size of five to seven members. As regards education level 41.00 per cent of the respondents were illiterate while only 12.00 per cent of the respondents were graduate and above. Majority of them were residing in *pucca*/semi-*pucca* houses while a few had *katcha* houses. Majority of the respondents were engaged in farming as their occupation. As regards landholding, 24.00 per cent of the respondents were landless while those who had land it was mostly less than 10 acres. On the whole almost 70 per cent of the respondents had their total annual income below Rs. 120000 per annum. Almost 50 per cent of the respondents had spent between Rs. 10000-20000 on food items while more than half of the respondents (53.00%) had spent between Rs. 20000 to Rs. 40000 on non-food items. Almost 80 per cent of the respondents had spent below Rs. 10000 on health care. There was significant difference between the districts as regards the sex, religion, family size, education, housing, occupation, landholding, total annual income and expenditure on health care.

To the issue of spread of various diseases it came out that one-third of the respondents suffered from anaemia and hypertension while the other notable diseases from which they suffered included reproductive health

problems, eye problems, diabetes, joint pain, gastric and stomach problems, Ear, Nose and Throat (ENT) problems, skin diseases etc. Further, 65 per cent of the respondents told that three or more members in their family had suffered from health problems with the major health problems being headache, Ear, Nose and Throat (ENT) problems, gastric and stomach problems, hypertension, diarrhoea and vomiting, eye problems, anaemia and reproductive health problems which shows that family members of respondents were under one or other type of illness. About one-tenth of the village population was found suffering from common diseases and four per cent were suffering from chronic diseases like hypertension, diabetes, cancer, tuberculosis etc. Almost 75 per cent of the respondents told that they did not go for regular health check-up due to reasons like no need of regular health check-up, shortage of time, lack of faith in usefulness of health check-up and financial constraints. This shows that ill-health is taken seriously only when it becomes problematic.

Further, the study revealed that out of the total respondents who visited the public health institutions majority (89.00%) visited the government dispensary or subsidiary health centre at the village level while in case of private health institutions almost 40 per cent of the respondents preferred taking treatment from chemist shop and almost 30 per cent of the respondents went to some *dera* or *mazar*. The other private health institutions visited included allopathic clinic, hospital, nursing home,

ayurvedic clinic and homeopathic clinic. The reasons for treatment from public health institutions included availability of free facility or low cost treatment (74.00%) while the other reasons were nearness to home, availability of qualified doctor, satisfactory treatment. In case of private health institutions almost 60 per cent of the respondents gave the reason as lack of facilities in public health institutions followed by 52.33 per cent of the respondents who told that they received satisfactory treatment from private health institutions. As regards location of nearest government health institution majority (58.33%) told that it was located outside the village while 78.00 per cent of the respondents had nearest government health institution within the range of 2 kilometers. Almost 17 per cent of the respondents did not visit the government health centre at all during last one month while only 14.33 per cent of the respondents visited the government health centre four or more times.

On the issue of non-availing the government medical facility the study revealed that almost three-fourth of the respondents held the view that they did not get proper treatment in government established health centre at village level due to reasons like inadequacy of medicines, lack of proper attention by health staff, no laboratory testing facilities etc. The respondents had to visit the government health centre at block level for diseases like diabetes, anaemia, reproductive health problems, Ear, Nose and Throat (ENT)/Eye problems, skin diseases, heart problem, tuberculosis and

malaria. Almost 40 per cent of the respondents told that the health professionals from block staff visit their village only once a month. There was significant differences between the districts as regards the location of nearest government health institution, distance of nearest government health institution, number of times the respondents visited the government health centre in the village, number of times health staff visit their village.

On the issue of the factors which promote the health problems in rural areas it emerged that though the people have the provision of medium type of housings yet the houses were largely surrounded by stagnant water, uncovered kitchen and bathroom or latrines. Almost 70 per cent of the respondents had water taps as source of drinking water while 73.00 per cent of the respondents told that there was no stagnation of water around their house. More than 50 per cent of the respondents told that they disposed off the garbage in the common garbage disposal area while 62.33 per cent of the respondents had kept animals mostly within the residential area. Almost 20 per cent of the respondents never washed their hands before and after meals and those who washed mostly used only water. Many respondents did not wash hands after defecation. Almost 43 per cent of the respondents told that they went to *babas* for cure of diseases who mostly gave some thread/*taveet*, asked them to give some *daan* or put their hand on their head. A large proportion of respondents told that going to the *babas* have somewhat cured them from diseases indicating their superstitious attitude due to widespread

illiteracy. Almost 40 per cent of the respondents told that there were 6-8 unqualified doctors or quacks in their village and almost one - third of the respondents admitted taking medicines from these unqualified doctors or quacks. The major reasons for taking medicines from these were that they were always available in the village, low cost medicines were provided by these quacks, satisfactory treatment was provided by them and they are near the homes of the respondents. The respondents mostly wait and see before going for treatment during illness when ill-health starts effecting their day to day work. The home remedies followed by the respondents included eating home-made products of medicinal plants, applying *haldi* on injury or wounds, eating some *Ajwain* or *Saunf*, drinking some *desi* tea etc. There was significant differences between the districts as regards the drinking water supply system in the house, whether water was stagnant around the house, place of garbage disposal, number of unqualified doctors or quacks in the village, whether treatment was taken from unqualified doctors or quacks.

In an effort to see the relationship between socio-economic status and health aspects of people it emerged that there was a highly significant positive relationship between the age of the respondents and whether they go for regular health check-up along with the positive relationship with education level of the respondents indicating that the older and highly educated respondents go for regular health check-up. The old-aged respondents visited the government health centre more times. There

was a negative association between education level of the respondents with whether going to *babas* have cured the respondents from diseases indicating that respondents with higher education did not go to the *babas* for cure of diseases. There was a negative relationship between education level with whether the respondents take medicines from unqualified doctors or quacks indicating that less educated respondents take medicines from unqualified doctors or quacks.

The health problem may generate lot of socio-economic problems and the study confirmed this fact as 72.67 per cent of the respondents revealed that their health problems do have certain economic consequences. The various economic consequences of health problems included more expenditure on medicines, more expenditure on treatment, economic instability, decrease in income and inadequate income to spend on prescribed diet. Almost 20 per cent of the respondents faced problem in meeting the daily expenditure of family. The various problems that the respondents faced included inability to provide good education to children, inadequate income to spend on food, inadequate amount to spend on health of family members and inability to provide good clothing. Data were further indicative that only 27.33 per cent of the respondents admitted that their interpersonal relations have deteriorated and majority of the respondents complained of lack of care from family members, increase in quarrels, showing irritable behaviour towards them and shouting at them and

inadequate participation in family and community life. Majority of the respondents (70.33%) told that they were taken care by their spouse during ill-health. Moreover, 31 per cent of the respondents admitted that their family members do face various problems due to their ill-health like regular care of patient, have to accompany the patient for treatment, wastage of time, fear of contracting disease and depression. All the respondents told that health problems have effect on physical well-being of the patient like inefficiency to work, tiredness, high blood pressure, headache, decrease in eyesight, loss of weight etc. A little more than 50 per cent of the respondents had certain effects on the psychological well-being of the patient. The various effects on the psychological well-being of patient included irritability, frequent quarrelling with family members, mental tension, decrease in concentration, lack of interest in talking with people, frustration and depression.

Further, information was collected from the health officials regarding the health set up and the availability of facilities. The data indicated that in case of only one health centre the number of doctors and health officials was more than four. There was a pharmacist in all the twelve health centres visited while the Multipurpose Health Worker (Female) was available in 91.67 per cent health centres. Almost 60 per cent of respondents told that the staff appointed by the government was not adequate with differences between the districts to be highly significant. As regards reasons

for inadequacy of staff almost 70 per cent of the respondents told that doctor was not available in the health centre while 65.28 per cent of the respondents told that there was no appointment of health staff and no laboratory technician for laboratory. There was only one health centre where the number of rooms was more than four. Only one-third, i.e., 33.33 of the respondents told that the building of the health centre was proper and gave the reasons for improper building as no proper toilet facility, building was semi-structured, less number of rooms in health centre and no proper arrangement of water supply and electricity. All the respondents told that facilities like beds, medicines were inadequate and the reasons given were medicines were outdated, beds are not available, medicine supply by the government was rare etc. Only one health centre had laboratory testing facilities. The number of patients sent to other centres for treatment due to inadequacy of facilities was mostly between 10-15 patients with difference between districts as significant. Data indicated that people were more prone to health problems during June-August. As regards the kind of problems faced by health officials while treating patients mostly they faced the problem of lack of medicines and other facilities, irregularity of treatment. The overall scenario of the government run medical institutions seemed quite discouraging. The suggestions given by the respondents included mostly medicines should be adequate and not outdated, health facilities should be adequate, more doctors and health officials should be appointed

and voluntary organisations should help.

SUGGESTIONS

On the basis of study some of the suggestions are made which may be helpful for strengthening the public health care system.

1. Equitable distribution of rural health care services for ensuring equity for health care should be ensured by the government. Location of health services and facilities should be such that these are accessible and available to the rural community as some Primary Health Centres (PHCs) are quite far off from my villages as suggested by the study.
2. As most of the respondents avoided the government health centre because of dearth of medicines and other facilities, it becomes utmost important to provide adequate medicines and facilities like beds, laboratory testing facilities so that rural people can take benefit from such facilities.
3. Keeping in view the increasing population pressure and incidence of diseases more doctors and health staff should be appointed by the government.
4. The study indicated that most people in rural area lack awareness about the need of health care so stress should be laid on generating awareness in the form of preventive measures regarding health care.
5. The people may be made aware about the negative consequences of

unhygienic surroundings and should be motivated towards personal as well as household cleanliness.

6. The study indicated that unqualified doctors or quacks are treating the rural people which in many cases proved fatal for health of the rural people so there should be strict check on the unqualified doctors or quacks.
7. A meaningful involvement of the private sector and NGO's is critical for promoting a people oriented and sustainable health care system.
8. The people should be motivated to shun their irrational beliefs and superstitions regarding ill-health and save themselves from entering in the vicious circle created by the religious persons, *babas* and other unreliable sources in name of treatment.

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APPENDIX-I

INTERVIEW SCHEDULE FOR DATA COLLECTION FOR THE STUDY "HEALTH PROBLEMS IN RURAL PUNJAB : STATUS, CAUSES AND CONSEQUENCES

**Department of Human Development and Sociology
PAU, Ludhiana**

PART-A (SOCIO-ECONOMIC CHARACTERISTICS)

1. Name of the respondent : _____ 2. Village: _____
3. Block : _____ 4. District : _____
5. Religion : _____ 6. Caste category : _____
7. Family type : a) Joint b) Nuclear
8. Total number of family members :

Demographic features

Sr. No.	Relation to the respondent	Sex M/F	Age (Years)	Education	Occupation	Annual income (Rs.)
	Self					

9. Housing type :
i) a) Katcha b) Mixed c) Pucca d) Any other (Please specify)
10. Size of Landholding (Acres) : (a) Owned ____ b) Leased in ____ (c) Leased out ____
Total operational holding (a+b-c) : _____
11. Family consumption expenditure (Rs.)

Item	Total amount spent/year
Food	
Clothing	
Housing	
Education	
Fuel	
Recreation/entertainment	
Marriage	
Socio-religious ceremonies	
Beverages and other drugs	

12. Expenditure on health care (Rs.)

Total amount spent/year

- a) Health personnel fees
- b) Medicines
- c) Injections
- d) Tests/X-rays
- e) Transportation
- f) Any other (Please specify)

PART-B
(PREVALENCE OF DISEASES AND FACILITIES AVAILABLE)

1. Which disease/diseases or health problems are you suffering from?
2. Is there any health problem or disease to the members of your family ? Yes/No
If yes, number of members suffering :
One Member, Two members, Three, Four or more members, All the members
3. Who in the family is suffering from the following diseases or health problems ?
(January 2002-December 2005)

Sr. No.	Name of disease/health problem	Adult M/F	Children	Old age M/F
1	Diarrhoea/vomitting			
2	Skin disease			
3	Malaria			
4	Irritation to the eyes/ears			
5	Asthma			
6	Headache			
7	Bronchitis/pneumonia			
8	Typhoid			
9	Sore-throat (cough)			
10	Goitre formation			
11	Rise in blood pressure (hypertension)			
12	Food poisoning			

13	Stomach ache/disorders			
14	Diabetes			
15	Heart problems/cardiovascular diseases			
16	Tuberculosis (TB)			
17	Anaemia			
18	Respiratory infections			
19	Cancer			
20	Tumour			
21	Weak eyesight			
22	Reproductive health problems			
23	Fever			
24	Polio			
25	Hepatitis-B			
26	Any other (Please specify)			

4. Do you go for health-check up regularly? Yes/No

If no, what are the reasons ?

- a) Lack of funds
- b) Shortage of time
- c) Lack of faith in usefulness of health checkup
- d) No need of regular health check-up
- e) Any other (Please specify)

5. Medical facilities available in the village

Which health institutions do you visit during illness ?

I. Public

PHC/CHC

Government dispensary/SHC

School dispensary

Sub-centre

Any other (Please specify)

II. Private

Hospital

Nursing home

Clinic (Allopathic)

Clinic (Ayurvedic)

Clinic (Homeopathic)

Chemist shop

Dera/Mazar

Any other (Please specify)

6. Reasons for the treatment from public health institutions
 - a. Satisfactory treatment available
 - b. Free facility/low cost treatment
 - c. Qualified doctor
 - d. Doctor is known
 - e. Near home (easily accessible)
 - f. Other reasons.
7. Reasons for treatment from private health institutions
 - a. Qualified doctor
 - b. Satisfactory treatment
 - c. Doctor known
 - d. Near home (easily accessible)
 - e. Specialised facility available
 - f. Personal attention given
 - g. Lack of facilities in public health institutions
 - h. Unavailability of qualified doctors in government institutions
 - i. Any other (Please specify)
8. What is the location of the government dispensary or health centre?
 - a. Within your village
 - b. Outside your village
 - c. Any other (Please specify)
9. What is the distance of nearest government health institution ?
 - a. Less than 1 km
 - b. 1-2 kms
 - c. 2-3 kms
 - d. 3-4 kms
 - e. More than 4 kms
10. How many times did you visit the government health centre during last one month?
 - a. Not visited
 - b. One time
 - c. Two times
 - d. Three times
 - e. Four times or more
11. Do you get proper treatment in the government established health centre at village level? Yes/No
If no, why ?
12. What are the health problems for which you visit the government health centre at block level?

13. How many times the doctor or health professionals from block staff visit your village ?
 - a. Once a week
 - b. After 2-3 weeks
 - c. Once a month
 - d. Whenever they feel
 - e. Any other (specify)

PART-C
(CONTRIBUTORY FACTORS LEADING TO HEALTH CARE PROBLEMS)

1. Do you have the following provisions in your house
 - a. LPG (gas chullah)
 - b. Smokeless chullah
 - c. Separate kitchen
 - d. Exhaust fan in kitchen
 - e. Wire mesh doors
 - f. Separate bathroom/latrines
 - g. Proper facility for ventilation
 - h. Any other (Please specify)
2. What type of drinking water supply system do you have in your house ?
 - a. Handpump
 - b. Water taps
 - c. Tubewell/motor
 - d. No provision
 - e. Any other (Please specify)
3. Is there any water stagnation around your house ? Yes/No

If yes is it -

 - a. Always
 - b. Sometimes
 - c. Mostly
4. Place of garbage disposal -
 - a. In one corner of the house
 - b. In the street
 - c. In the common garbage disposal area
 - d. In dustbins
 - e. Adjoining open areas
 - f. Any other (Please specify)
5. Have your kept animals? Yes/No

If yes, where do you keep animals :

 - a. In separate courtyard
 - b. Within the residential area
 - c. In the fields
 - d. Any other (Please specify)

6. Do you wash hands before or after meals ?
 - a. Never
 - b. Sometimes
 - c. Mostly
 - d. Every time
 With what : Soaps/Ash/Sand/Water only
7. Do you ever go to *ojhas* or *babas* for cure of diseases? Yes/No
8. What do they do to cure you from the health problem?
 - a. Give oral pills
 - b. Give ash
 - c. Give some thread/*taveet*
 - d. Ask you to make some *daan*
 - e. Put their hand on your head
 - f. Enchant some mantras
 - g. Massage treatment
 - h. Any other (Please specify)
9. Does going to the *babas* have cured you from diseases? Yes/No
10. How many unqualified doctors/quacks are there in your village? _____
11. Do you take medicines from these unqualified doctors who have opened their clinics in the village ? Yes/No
If yes, why ? _____
12. When you are ill do you go for treatment :
 - a) Immediately
 - b) Wait and see
 - c) When it starts affecting day to day work
 - d) When you become incapable
 - e) Any other (Please specify)
13. What home remedies are followed in case of disease or illness?

PART-D (SOCIO-ECONOMIC IMPLICATIONS OF HEALTH PROBLEMS)

1. Does your health problem have any economic consequences? Yes/No
If yes, mark against the suitable consequences
 - a. Decrease in income
 - b. Economic instability
 - c. More expenditure on medicines
 - d. More expenditure on treatment
 - e. Inadequate income to spend on prescribed diet

- f. Indebtedness due to loan taken for medical purposes
 - g. Not able to spend adequate amount on social ceremonies.
 - h. Any other (Please specify)
2. Do you face any problem in meeting the daily expenditure of your family due to ill-health? Yes/No
If yes, what problems do you face?
3. Do you feel that inter-personal relations with family members have deteriorated due to ill-health? Yes/No
If yes how :
- a. Increase in quarrels
 - b. Shouting at them
 - c. Lack of care from family members
 - d. Irritability of family members
 - e. Any other (Please specify)
4. Who cares for you during ill-health ?
- a. Spouse
 - b. Son
 - c. Daughter
 - d. Daughter-in law
 - e. Grandchildren
 - f. Any other (Please specify)
5. Does your family members face any problem due to your ill-health? Yes/No
If yes, problems faced
- a. Depression due to continuous illness
 - b. Have to accompany the patient
 - c. Regular care of patient
 - d. Fear of contracting disease
 - e. Time is wasted
 - f. Any other (Please specify)
6. Did the ill-health have any effect on your physical well-being ? Yes/No
If yes, what effects ?
- a. Tiredness
 - b. Inefficiency to work/lack of interest
 - c. Loss of weight
 - d. Decrease in eyesight
 - e. Hearing problems
 - f. Headache
 - g. Nausea
 - h. Vomitting
 - i. High blood pressure

- j. Loss of appetite
 - k. Any other (Please specify)
7. Did the ill-health have any effect on your psychological well being ? Yes/No
If yes, what are the symptoms?
- a. Frustration
 - b. Depression
 - c. Irritability
 - d. Frequent quarrelling with family members
 - e. Mental tension
 - f. Decrease in concentration
 - g. Lack of interest in talking with people (interaction)
 - h. Any other (Please specify)

PART-E INFORMATION FROM HEALTH PERSONNEL

Health centre _____

Command Area Villages _____

1. How many doctors and related health officials are there in your health centre and what are their staff positions ? _____
2. Is the staff appointed by the government in the health centre adequate? Yes/No
If no, why ? _____
3. How many rooms are there in health centre ? _____
4. Is the building of the health centre proper ? Yes/No
If no, why ? _____
5. Are the facilities like beds, medicines etc. adequate ? Yes/No
If no, why ? _____
6. Are the laboratory testing facilities available in the health centre? Yes/No

7. How many patients had to be sent to other centres for treatment due to inadequacy of facilities? _____
8. Which is the period of the year when people are more prone to health problems?
9. What kind of problems do you face while treating the patients?
10. What suggestions do you give to improve the health set-up in the government health centres?

APPENDIX-II

List of districts, blocks and villages under study

Districts	Blocks	Villages
<i>Ludhiana</i>	Pakhawal	Gujjarwal
		Mansuran
	Machhiwara	Herian
		Kotala
<i>Bathinda</i>	Talwandi Sabo	Jewan Singh Wala
		Singo
	Bhagta Bhaika	Dhodipura
		Aklian Jalal
<i>Amritsar</i>	Chaugawan	Boparai Kalan
		Lopoke
	Jandiala Guru	Gehri Mandi
		Bhangwan

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