

MFN : 39

दर्ता नं 917.
विषय NHR.C
मिति March 26, 2003

University of Heidelberg
Institute of Tropical Hygiene and Public Health

Postgraduate Master Of Science Course
Community Health And Health Management In Developing Countries

**User Fees and Ability to Pay.
A Comparative Study on Quality of Care in
Siraha and Lahan Hospitals, Nepal.**

May to June 2000

A dissertation Submitted in Partial Fulfilment of Requirement of the Award of
Master of Science in Community Health and Health Management in
Developing Countries

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MASTER OF SCIENCE COURSE
COMMUNITY HEALTH AND HEALTH MANAGEMENT
IN DEVELOPING COUNTRIES

DECLARATION

This thesis is the result of independent investigation. Where my work is indebted to the work of others, I have made acknowledgement.

I declare that it has not already been accepted in substance for any other degree, nor is it concurrently being submitted in candidature for any other degree.



Javaid Akhter

MSc. Course Participant

July 31, 2000

ACKNOWLEDGEMENT

I wish to dedicate my work to my parents specially my father, whose hard-work and deep attention was instrumental for my advancement and success in life. I am grateful for all the sacrifices he did for me, to ensure my education and the attainment of my goals. This first destination is just a step in a long road ahead of me.

First of all, I would like to thank my tutor, Mr. Faiz Mujirja, whose valuable guidance, and special encouragement at all the stages of my research work that actually enabled me to make this final submission.

I am thankful to Mrs. Elvigi Weber, whose generous support provided me an opportunity to think and clarify my concept on the main theme of the study. I would must acknowledge the feedback of Mrs. Maria and Dr. Katrin Kuhlmann for helping me to make my research inscriptions more practicable.

I would like to thank Michael Weber for all his help and support.

I am grateful to the Aga Khan Foundation, Pakistan and Aga Khan Health Service Pakistan specially Mr. Stephen Hayes, Mr. Ali Akbar Sherazi, Mr. Akhter Ali Nichdi and Mr. Aziz Ahmed Jan who professionally and personally helped me to get this opportunity to broaden my educational background through this course.

I am very indebted to Dr. J.P. Steinhilber and staff of host organization, PHC Project GTZ, Nepal, and special thanks to my field tutor, Mr. Arjun Jang Shah and special thanks to Mr. Babur Shrestha & Mr. K. Harel who gave their professional input to make this research possible. I appreciate the valuable contributions of Mr. Ranji Dhakal who helped me to understand the Nepalese culture. I am thankful to Mr. Pankaj Shrestha who was very much supportive in organizing the focus group discussions and community meeting in the study area. Last, but not the least, I am very much thankful to Dr. Olive Bryugh for her personal support and kind help during this research work. I should not miss to thank my respondents who participated willingly in this research.





ACKNOWLEDGEMENT

I would like to appreciate and thank all those , who supported and helped me to complete this valuable piece of research. It is difficult for me to start with the names because every one has its own importance in the way of their eminent contributions.

First of all, I would like to thank my tutor, Mr. Phare Mujinja, whose valuable guidance, scholarly inputs, profound constructive critical feedback, patience all along the time and special encouragement at all the stages of my research work that actually enabled me to make this final culmination.

I am thankful to Mrs. Siggi Wolter, whom generous support provided me an opportunity to think and clarify my concept on the main theme of the study. I would must acknowledge the feedback of Mrs. Marja and Dr.. Karina Keilmann for helping me to make my research instruments more practicable.

I would like to thank Michael Weber for all his help and support.

I am grateful to the Aga Khan Foundation, Pakistan and Aga Khan Health Service Pakistan specially Mr. Stephen Hayes, Mr. Ali Akber Sherali, Mr. Akhter Ali Mehdi and Mr. Aziz Ahmed Jan who professionally and morally helped me to get this opportunity to broaden my educational background through this course.

I am very indebted to Dr. J.P. Steinmann and staff of host organization, PHC Project, GTZ, Nepal, and special thanks to my field tutor, Mr. Arjun Jang Shah and special thanks to Mr. Ishwar Shreestha & Mr. K. Burtel who gave their professional input to make this research possible. I appreciate the valuable contributions of Mr. Ramji Dhakal who helped me to understand the Nepalese culture. I am thankful to Mr. Pankajh Sharma who was very much supportive in organizing the focus group discussions and community meeting in the study area. Last, but not the least, I am very much thankful to Dr. Ollie Bayugo for her personal support and kind help during this research work. I should not miss to thank my respondents who participated willingly in this research.

LIST OF ABBREVIATIONS

AHW	Asistant Health Worker
AKF, P	Aga Khan Foundatin, Pakistan
AKHSP	Aga Khan Health Service, Pakistan
CDO	Chief District Officer
DDC	District Development Committee
DHDB	District Health Development Board
DHO	District Health Officer
FCHV	Female Community Health Volunteer
FGD	Focus Group Discussion
GNP	Gross National Product
GTZ	German Technical Cooperation
HA	Health Assistant
HMG	His Majesty Government
HP	Health Post
INGO	International Non-Governmental Organization
LDO	Local Development Officer
MCW	Maternity and Child Health Worker
MIS	Management Information System
MO	Medical Officer
MoH	Ministry of Health
MS	Medical Superintendent
NGO	Non Government Organization
NRs.	Nepal Rupees
OPD	Out Patient Department
OT	Operation Theatre
PHCP	Primary Health Care Project
SHP	Sub Health Post
TBAs	Traditional (trained) Birth Attendant
VDC	Village Development Committee
WHO	World Health Organization





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1. EXECUTIVE SUMMARY

User fees at government health facilities are being promoted, increased or introduced internationally. It is suggested that user fee for those who can afford to pay is a useful policy instrument for promoting health policy objectives: greater efficiency, through their influence both on provider and user behavior; greater sustainability of health services of adequate quality through the generation and use of additional resources; and greater equity, by cross subsidization of more accessible and higher quality services for the poor (World Bank 1993).

Siraha and Lahan hospitals are providing health services to the patients referred from 115 health facilities (HP, SHP, PHCC) in Siraha District. Despite the high prevalence of diseases, the service utilization rates of these hospitals are considerably low; less than 3% of the population, visit these hospitals. Low utilization of hospital services, might be two fold one due to the financial inaccessibility and two, because of more accessible to the traditional healers or patients perceive the quality of services in hospital is not good. Patients pay a very nominal registration fee Rs. 5/- (US\$0.14) which constitutes only 3-4% to the total operating cost of the hospitals. According to the 1997/98 report, both hospitals collected Rs. 340,000(US\$4860) from user fee and stall rental.

Due to the insignificant cost recovery in Siraha and Lahan hospitals, quality of health services could not be improved and utilization rate has been declining. There is still an enormous potential available to raise the funds if the affordable user fees is introduced. It will improve the quality of services and access to the users who are not utilizing the public health facilities.

The overall objective of this descriptive study was to assess the users ability to pay fees for health services and their perceptions on the quality of services in Siraha and Lahan hospitals, Nepal.

The study was based on the use of quantitative and qualitative methods, using structured interviews, semi-structured interviews and focus groups discussion. A Total of 100 adult



male and female patients were selected and interviewed with the purposive selection technique; at the exit poll of Siraha and Lahan hospitals. All exit interviews of the patients were conducted when the patient had gone through the registration, consultation, diagnostic measurement (laboratory and x-ray) and receipt of medicines from the hospital's pharmacy. Four focus groups discussion with 10-14 participants, were conducted in two municipalities. The selection of focus group interviews was on the basis of higher, lower, utilization of hospital service, depressed community "Tatma" and vulnerable (women) group in ward "Chenghai" Siraha.

According to overall findings of the study, the quality of services in Siraha and Lahan hospitals was found low and patients were not satisfied with the services provided in the hospitals. Quality of services was perceived poor on the basis of non-availability of medicine, laboratory test and long waiting time to see the health provider. Utilization of services was found higher among Hindus and low among Muslim ethnic groups. Private practice was found more common with public providers who were charging fee twenty times higher than public hospital. Users were able and committed to pay higher fees in the public hospitals on the condition of availability of medicine, short waiting time and good consultation from the health provider. Ability to pay for services was found higher among Hindus and especially with rural community. Average expenses made on the treatment of last sickness episode was ranging from NRs.1000-15000 depending on the severity of illness and importance of the member in the family. Priority for treatment was given to married woman, son and earning member in the family because their illness may effect the household activities and income.

It is recommended that quality of services in the hospitals must be improved by ensuring the availability of medicine, equipments and technical manpower. Establishment of paying clinics (afternoon) and fair price drug shops in these hospital are recommended as patients and providers were agreed to use the health facility.

1. On the basis of finding of this exploratory study, it is recommended that a study on a representative sample to assess the perception of non users of hospitals on the

quality of services and their willingness & ability to pay should be carried out.

4. It is recommended by the researcher to initiate a study to determine the gender related factors associated with the willingness and ability to pay in Siraha district.



2. INTRODUCTION

2.1 BACKGROUND

In 1978, after the Alma Ata declaration, community participation took over a key role in the delivery of health services and financing health services. Due to economic crisis in the developing countries, resource allocation in health services is very low and leads to inaccessibility and low quality of the services. Since the economic crises of the 1980s and structural adjustment policies greatly affected the vulnerable population especially women and children in developing countries, in many of these countries the level of nutrition, education and access to the health care deteriorated (Kanji 1992).

The decreasing or static health budgets with diminishing resources and limited availability of convertible currency led to drug shortages in many countries particularly in primary level services in rural areas. (Kanji. Et al.1992). For this purpose, government efforts to improve health care are unlikely to rely on increases in public spending financed by debt or taxes or on the reallocation of public expenditures from other sectors, even though such increases or reallocations would economically as well as socially be justified (Maopimoke 1993). To cope with these problems, many developing countries are looking for an alternative concerning health service financing through the involvement of communities. Some of the developing countries have already started implementing instruments for cost recovery such as user fees, drug revolving funds, registration fees, consultation charges, paying clinic and community based health insurance schemes.

User fees is considered as an important source for financing health care. It would reduce the government responsibility for paying for those kinds of health services that provide few benefits to society as a whole (as opposed to direct benefits to the users of the service). More public resources would then be available to pay for the services that provide many benefits to society as a whole. By relieving governments of the burden of spending public resources on health care for rich, this approach would free resources so that more could be



spent for the poor.¹

Various approaches have been implemented and practiced in different countries ranging from user fees, community based health insurance, drug revolving fund and pre paid health card schemes. Institute charges at government facilities, especially for drugs and curative care will increase the resources available to the government health sector, allow more spending on under funded programs, encourage better quality and more efficiency and increase access for the poor. The well-designed health insurance programs will encourage to help mobilize resources for the health sector while simultaneously protecting households from large financial losses. Establishment of an effective drug revolving fund will ensure the provision of drugs to the communities at affordable prices and will reduce a large share of public spending for medicines.

There is an obvious danger of introducing / increasing fees at government hospitals is that underserved communities will be discouraged to access health facilities. Experience of to-date studies suggests that utilization of services declines when fees are introduced and although few studies disaggregate utilization patterns by the socio-economic status of the user like poorer groups will have more difficulty in paying for health services. User fees will generate revenue and promote equity if they are affordable to all groups in the population and will not affect as a barrier to utilization². Some studies found that in specific circumstances, fees increase the utilization of services by the poor, if the user funds are used to improve the quality of services (Litvack and Bodart 1993).

The Siraha and Lahan are two referral hospitals for providing health services to the patients referred from 115 health facilities (HP, SHP, PHCC) in District Siraha. Despite the high prevalence of diseases, the service utilization rates of these two hospitals have been considerably low; less than 3% of the population, visit these hospitals (FYP,2056/2060).

¹. The categories of “ rich” and “poor “ will be depend on a country’s income structure and social objectives

² Creese (1991); Gertler and Van der Gaag 81990): Thomason et al. (1994b).

Patients either visit private practitioners, traditional healers (most common) or do self-medication. Low utilization of hospital services, might be due to the good consultation from private clinic, less paying and more accessible to the traditional healers or patients perceived the quality of services in hospital is not good. Patients pay registration fee Rs. 5/- (US\$0.14) which constitutes only 3-4% to the total operating cost of the hospitals. According to the 1997/98 report, both hospitals collected Rs. 340,000(US\$4860) from user fee and stall rental. (DHC F.Y Plan 2054/055-Nepal).

Due to the insignificant cost recovery in Siraha and Lahan hospitals, quality of health services could not be improved and utilization rate has been declining. There is still an enormous potential available to raise the funds if the affordable user fees is introduced. It will improve the quality of services and access to the users who are not utilizing the public health facilities.

In line with the policies and strategies of the Ninth Plan (1997-2000) of HMG, Nepal, Siraha district formulated Five-Year District Health Plan (1998-2002) with a particular stress to improve quality of care in the district. One of the important objective of this plan was to carry out research in Siraha district on the effectiveness of user contribution in public hospitals.

“Special concentration was given to identify the programs in which consumer participation could be strengthened. The delivery of health services will be improved through effective utilization of existing infrastructure, medical supply, management of financial and human resources and community participation”
(DHC F.Y Plan 2054/055-Nepal).

Primary Health Care Project, GTZ, Nepal expressed their interest in this study as they are already working to strengthen the district health financing system in Siraha and Dhading districts, Nepal. The study will not answer the feasibility of community financing scheme, however it will provide information on what people pay for health care and what they would be able to pay in future. This research will assess the users and providers perception on the quality of services and users ability to pay fees for these services. The feedback will be helpful for decision making and future planning in Siraha District.

2.2 COUNTRY PROFILE

Nepal is situated in between 26°22 to 30°27 degrees north latitude and 80°4 to 88°12 degrees east longitudes. It is located between India and China and its total land area is 147181 Sq.Km.. Ecologically the country is divided into three regions, i) terrain 23%, ii) hills 42% and mountains 35% of the total land area (HMG/MOH/WHO; 1988). The terai region lies on the southern part of the country, being an extension of the Gangetic plains of India, forms a low flat land. Forty percent of its land area is suitable for cultivation and a wide range of crops are cultivated such as paddy, maize, wheat, sugarcane, vegetables, tobacco and other crops (FYP,2056-2061).

Nepal is constitutional monarchy with executive power vested in His Majesty's the King. Normally, however it is exercised on the recommendation of the cabinet headed by the Prime Minister. (HMG/MOH/WHO,1988). The country is divided into 75 districts with five development regions. The Chief District Officer (CDO) and Local Development Officer are two key personnel in each districts. Districts are further divided into Village Development Committees and Municipalities as local units. Currently, there are 4000 VDCs, 58 Municipalities including one Metropolitan and three Sub metropolitan cities. VDC and Municipality are sub divided into smaller units, called the Ward and generally each VDC has 9 wards.

The country spent an estimated development expenditure of NRs. 82.2 billion, but it remains the least developed with per capita GDP for the year 1995/96 is US\$ 220. About 90 percent of 21 million people of the country, live in the rural areas and 71 percent of the population lives below the poverty line. Population is growing at the rate of 2.1% per annum and overall literacy rate is less than 40% (World Bank/UNDP,1990). Nepal also participates in regional cooperation activities as a member of the South Asian Association for Regional Cooperation (SAARC) and acts as the coordinator of health programs. (WHO, 1984).

2.3 DEMOGRAPHIC PROFILE

The projected population of Nepal in 1993 was about 18462 (MG,1993). The population

1681
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aged 65 years and above was 3.1 percent and population living in urban areas according to the 1992 figures is 12 percent. Life expectancy at birth has been recorded in 1993 is 54 years. The growth rate recorded in 1990 was 2.5 percent with the population density of 139 per Sq. Km (WHO,1993).

2.4 CASTE SYSTEM IN NEPAL

The caste structure is based on the Hindu Varna System and Manu is regarded as the founder of four castes-Brahmin (priest), Kshatriya (warrior), Vaisya (trader) and Shudra (untouchable). The Tibeto-Burman groups, who are mainly Buddhists, are also incorporated into the caste system (HMG/UNICEF,1992).

2.5 NATIONAL HEALTH SYSTEM OF NEPAL

According to the institutional framework of the Department of Health Service, MOH, the Sub-Health Post (SHP) functions as the first contact point for basic health services. Sub-Health Post is the referral center of the volunteer cadres of TBAs, FCHVs (Female Community Health Volunteers) as well as community based activities such as PHC and EPI outreach, and home visiting. Referral system has been established within Sub health Post, Health Post, Primary Health Care Center, District Hospital, Zonal Hospital and teaching hospitals in Kathmandu. Nepal has been divided into 14 Zones and among this 9 Zonal, 75 district health offices, 50 District Hospitals and 75 Public Health Sections. (Dixit H, 1995).

In 1993, the health system was restructured at national level, Ministry of health was consisted of Nepal Health Research Council, Nepal Ayurvedic Council, Nepal Nursing Council and Nepal Medical Council. MOH has its five main units which are Department of Ayurved, Drug Administration, Health Services, Unani Dispensary and Homeopathic Hospital. Department of Health Services has mainly six divisions like Planning & foreign Aid Division, Family Health, Health Institutions and Manpower Development, Epidemiology & Disease Control, Logistics Management and Child Health. Regional Health Services Directorate has major five components that are Regional Hospital, Regional Training Center, Regional Laboratory, Regional Medical Store and Regional Tuberculosis Center. Services have been established and are functioning in five

development regions (structure is attached as annex -).

2.6 STUDY AREA: DISTRICT SIRAHA

Siraha is one of the six districts of Sagarmatha zone located at about 414 Km. Away in the South East of Katmandu, the capital of Nepal (Map as an annex...). It is spread over 38.8 km, east west and 28.8 km north south with a total area of 1,713 sq. km,. According to Sub National Population Projection Nepal, the total population of Siraha was 554,384 in 198 (average population growth rate 2.73% per annum). There are about 90,000 households in this district with an average family size of 6.26 and population density of 388 sq.km. Siraha is inhabited by the Buddhists, Hinuds, Muslims and Kiraties. The people of this district speak Maithli (85.75%), Nepali (5.26%), Tharu (2.50%), Taming (0.25%), Magar (0.82%), Bengali (0.16%) and others (5.26%).

There are 106 Village Development Committees and two Municipalities (Lahan and Siraha) in the district. The total population was 314,057 and about 149, 1999 (47.3%) were economically active including 36% males and 11.5% females. The highest proportion was engaged in Agriculture (80.5%), by trade (14.6%), education (1.7%), administrative service (0.9%) and other occupations (2.3%). The proportion of literate male and female population remain to be as low as 43.5% and 13.3% respectively.

2.6.1 Health Situation in Siraha District

2.6.1.1 Public Health Facilities

Health services in the District Hospital are provided by the Medical Superintendent, Medical Officer, Staff Nurse, HA, ANM, AHA, X-ray technician, Laboratory Assistant. There are Administration, Family Welfare, Child Health Disease Control, Health Promotion, Training, Health Information and Statistical Sections under the Public Health Division (Annex-). The Primary Health Care Centers (PHCC), Health Posts (HPs) and Sub Health Post (SHP) of the district are also managed by the Public Health Division.

Table 1: Number of public health facilities in Siraha District.

Health Facilities	Number	Location
District Health Office	1	Siraha Municipality
Hospitals	2	Siraha Hospital (18 beds), Lahan Hospital (18 beds)
Primary Health Care Centers	3	Mirchaiya (3 beds) Aurahi (3 beds) and Dhangadi (3 beds)
Health Posts	12	
Sub Health Posts	94	All VDCs having no other health facilities (PHC, HP or hospital)
Ayurved Dispensaries / Center	4	Siraha Municipality, Lahan Municipality, Mirchaiya, Goal Bazar
Total:	115	

Source:- District Health Office, 2055 B.S.

2.6.1.2 Private Sector Health Institutions

Lahan Eye Hospital, three training centers, 7 Clinics run by the medical doctors and about 220 medical shops constitute the private sector health institution of the district. The training center offer CMA; ANM and Lab Assistant Courses.

2.6.1.3 Traditional Health Institutions

The traditional health system such as faith healer (Dhami Jhankri), Purohit, Homeopathy and Naturopathy and treatment by medical shops does also exist in the district as the health needs of the people are not adequately met by the public health facilities.

2.6.1.4 Management Board /Committees/Sub-Committees

District Health Development Board was established by the Siraha District Development Committee under the DDC Act, 1992 (2048). The Board has key objectives to formulate district health policy, plans and strategies by mobilizing government agencies, I/NGOs and private sector related to health. **Health Management Committees** are operational in all PHCs, HPs and SHPs. The committees consist of Chairperson of VDC as President and members from social and health sectors. **Hospital Helping Committees** are established in Siraha and Lahan Hospitals. The main functions of these committees are to determine registration fee/user charges and to improve management in the hospital.

2.6.1.5 Health Manpower

There are 608 technical and administrative staff positions for the health facilities, 418 belong to the technical health personnel and presently only 366 health personnel are working. An analysis of the existing situation of health manpower in the district reveals that the position of medical officer, staff nurses and ANM at Siraha and Lahan hospitals and PHC are either not fulfilled or they don't want to work in the rural areas. The health volunteers responsible to deliver essential health services at the village level include 999 Female Community Health Volunteers (FCHVs) and 180 Traditional Birth Attendants (FYP 2056/61).

2.6.1.6 Physical Infrastructure

All the health posts and hospitals have their own office buildings and staff quarters. While the primary health care centers are housed in rented buildings. Likewise, sub health posts do not have their own buildings; they are running in the space / rooms made available by the VDCs. Similar situation exists in Ayurved health facilities too. Majority of the buildings of hospitals and health posts have cracks due to construction defects. The problem is aggravated with the leakage in the buildings during rainy season.

Increasing the bed capacity of Siraha and Lahan hospitals, has become difficult due to shortage of rooms. Ultrasonography, Endoscopy etc; need to be installed at the hospitals for quality health services. Two buildings; one for maternity service and another for training of district staff had been constructed during the last year but not yet handed over to the management committee for the public use. Medical equipment is supplied by the government are not in working condition.

2.6.1.7 Drug Supply

The drugs are supplied by the government once a year, each hospital receives medicines worth NRs. 100,000 under regular and development budget. The concerned health personnel have been reporting that the government drug supply is adequate only for 3-5 months. The supply of drugs is based on a uniform list of medicines applicable to all health facilities instead of morbidity and disease patterns of the local communities.

2.6.1.8 Information Management

Information are collected at public health facilities and sent to the center each month in order to strengthen information management system. But the information related to the traditional health system and private sector are not included in this information management system.

2.6.1.9 Disease Pattern and Health Services

In the Siraha District, preventive, curative and promotive health services are made available through the health institutions working in government, NGO and private sectors. The following table shows the disease pattern and health services in Siraha district (see Annex.001).

2.6.2 General Information about Siraha Hospital

This hospital was established 35 years ago with a capacity of 15 beds. With the addition of three more beds by the Hospital Management Committee, the bed capacity now has increased to 18 beds. In year 1997/98, a total of 15,100 patients were attended at the hospital. Of these OPD patients, 1080 were admitted in the hospital and 64 were referred to other appropriate health facilities and 24 died in the hospital.

On average, 10-20 persons receive emergency service in the hospital per day. Likewise, the OPD patient load per day has been recorded to range between 45-70 persons. Quality health service is not yet available in the hospital due to lack of trained doctors and other logistics support. The hospital bed occupancy rate in the fiscal year 1997/98 has been 78% on an average. A total of 7265 patients received lab facilities from the hospital. An ambulance has been provided through the financial support of an international donor agency to provide the ambulatory care to the communities. This facility is managed by the “ Ambulance Support and Development Committee”.

The population of the district has doubled from the time the hospital was established. The demand for health services has also risen with the increase in population. While the delivery of health services is not consistent with the increasing demand due to shortage of hospital beds, trained health personnel and basic physical infrastructure. The annual budget

received from the MOH is not adequate to meet the needs of the hospital, the Hospital Management Committee raises funds from user fees and stall rentals. The amount collected, however, is insignificant in the total expenditure of the hospital.

2.6.3 General Information about Lahan Hospital

Lahan hospital is situated on the East West Highway, it was established with 15 beds in 1982 with the help of two businessmen and later on handed over to the government. It provides services to the population of two districts i.e. Siraha and Saptari. With the addition of 35 beds from the Hospital Management Committee, the number of beds in the hospital has now increased to 50 (FYP 2056/61, Health Situation by Devkota).

In fiscal year 1997/98, a total 15,287 patients were attended at the hospital. Of these total OPD patients, 3505 were admitted in the hospital of whom 3,309 returned home after treatment, 115 were referred to other health facilities and 81 died in the hospital. Average 15-30 persons receive emergency service in the hospital. Similarly, the OPD patients load per day has been recorded to range between 70 to 100 persons. The hospital bed occupancy rate in the fiscal year 1997/98 has been 65% on an average. A total 7,270 persons received the laboratory services of the hospital.

Presently, it is necessary to increase the technical manpower in this hospital to provide continuous services. Similarly, there is an ongoing demand by the communities to upgrade it into a " High Way Hospital " because the accident cases attended at the hospital are on increase every year. The government budget allocated for the hospital is reported to be grossly inadequate. The hospital also provides ambulance service and recently, a blood bank has been established with the financial support of a donor agency. This is the only blood bank in the district to provide blood facilities to 525,000 population.

In addition to the essential health services provided by the public health facilities, the people of Siraha district also have access to specialized service (e.g. eye treatment), health education, environment health, family planning, maternity and child health and other public health and curative services presently available in the health facilities run by the private

sector and I/NGOs.

2.6.4 Health Expenditure in the District

Health programs (public health and clinical) are funded out of budget received from His Majesty's Government. The budget is allocated under regular budget based on internal revenue generation and development budget. In a period of last five years, an amount of slightly over 80 million rupees was expended by the District Health Office of Siraha. The expenditure increased to over Rs. 23 million in the fiscal year 1997/98 (an increase of 144.5) from Rs. 9.5 million in 1993/94 . The development budget constituted merely 19.8% of the total expenditure was expended on various health programs. The programs funded under the development budget include control of kala-azar, malaria, tuberculosis, leprosy, ARI, ARV, EPI, FP, maternity services; supply of drugs, equipment, integrated supervision, nutrition, health education information and communication. Lahan hospital receive regular budget separately. During the last fiscal year, Rs. 1588,000 was spent in Lahan hospital (FYP 2056/2061).

The total per capita expenditure incurred in Siraha District in the fiscal year 1997/98 was Rs. 46.74 only. According to the District Health Office, Siraha, Rs. 340,000 from Siraha hospital and Rs. 3,60,000 from Lahan hospital were collected through registration fee and other user charges (x-ray, lab services and hospitalization) during 1997/98. The health expenditure incurred by the donors and NGOs/INGOs in the district for health is estimated to per capita for Rs. 74.03.

Study question

Are users of Siraha and Lahan hospitals able to pay user fees provided that the quality of services would be improved.

The specific questions were

- 1. What do people /consumers pay for the treatment of an illness episode.**
- 2. Where did the patient visit before coming to hospital for seeking health care.**
- 3. Did patients get treatment according to their expectations.**
- 4. How do they perceive the quality of services in hospital.**

5. How much income did they loose due to illness.
6. What are the sources of income used to pay for health care.
7. What they will be able to pay for health care in public hospital for their treatment.

3. LITERATURE REVIEW

The health care financing is a critical issue in many developing countries. The World Bank (1987), found that consumers are almost always willing and able to pay directly for health services with largely private benefits (e.g. aspirin for headache) but they are generally reluctant to pay directly for program and services which benefit the society or communities as a whole. For those reasons, curative care, whether provided by the government or private sector, should be paid for by those who receive the care. If we shift this responsibility to users, it would also increase the public resources available for government provision of basic curative care and referral services to the poor (World Bank, 1987).

Economic development in third world countries, has failed to fulfill optimistic hopes and is going from bad to worse which has led to falling per capita incomes, rising unemployment and cutting social expenditures. They are forced to look at alternatives concerning health sector financing to achieve the sustainability (Kortel et al., 1992). Smithson (1995) in his studies of five low income countries found that the government resources were very low and availability of domestic resources declined drastically during the 1970s and early 1980s were depended on external resources/assistance.

Social sectors like health and education are not achieving their target objectives. In health, demotivated staff due to lack of remuneration, lack of drugs and appropriate medical supplies resulted in the under-utilization of health facilities. Public finances are shrinking every year and population is increasing. Morbidity and mortality rates are increasing and the life expectancy of individual is decreasing which contributes the global burden of disease and economic loss in. The current crisis has exacerbated the problems due to changing patterns of diseases from ARI to HIV/AIDS. The high cost of treatment and appropriate interventions are leading to economic challenges for future. The cost recovery in public hospitals is very low and most of the public health budget moves to the secondary care units i.e hospitals. The great majorities (two-third) of developing countries spend more than 50% of recurrent health budget on hospital (Barnum, Joseph Kutzin, 1993).

Different reasons for the resource gaps in health services due to several natural disasters, which are often misused by the politicians to get benefit at their own level. The international loan (IMF), their obligation and conditions to meet the criteria and to get funding for development programs. The international aid /assistance did not increase as it was expected by the donor agencies. International health sector related problems hence are not shrinking: the efficiency and quality of health services expenditure are declining, partly due to less spending in health sector (Mill, 1986; Berg, 1991; and De Ferranti, 1985).

It has been argued in the Alma Ata recommendations that provision of primary health care to under served communities, should be given first priority by the governments. They should encourage and support various means of financing PHC including where appropriate such means as social insurance, cooperatives and to tap all available resources at the local level, through the active involvement and participation of communities. Further, they should take measures to maximize the efficiency and effectiveness of health related activities in all sectors (WHO, 1994).

It is difficult to answer that how the developing countries may reduce their big gap in health services and resources. Leiserson and Abel-Smith (1980), experienced that community organization, participation and communal self help are the important sources of financial support to health services in developing countries **by making the best of scarce resources available in the country.**

3.1 FINANCING OPTIONS

Health financing options vary according to the length and breadth of the health services and available resource within the country. More common financing option are taxes, user fee (direct user fees, pre-payment system) community financing, insurance, voluntary contribution and financing organizations.

3.2 SOURCES OF FINANCING

There are different sources to finance health care services in developing and industrialized countries. Which source is best and workable, it depends on the socio economic status and

demographic profile of the country. In industrialized states, social health insurance schemes are working very efficiently on the principle of solidarity. In developing countries drug revolving funds, community based health insurance have been implemented with a major goal to achieve the maximum level of utilization and improve the cost recovers in health services. More common sources of financing health services are User fee (out of pocket), central government spending, district / regional grant and special budgets for health services, community based health financing program, special programs financed by non governmental organization, and international donor agencies to improve the health of the communities. More emphasis has been now given to community financing.

Hoare & Mills (1986) found that “ community financing is argued as a diversion of governments lacking the political will to generate new sources of revenues or to reallocate existing ones. Although, in some instances it can make a substantial contribution, community finance is unlikely to generate sufficient resources by itself to meet country needs and should be seen as complementary to, rather than as substitute for, other sources of finance”. Stison (1984) concluded that “ community financing is at best only a partial solution and is less effective than the reallocation of current resources and that governments have to facilitate and encourage not to impose”. The opponents of community health financing argued that this mechanism put the burden of financing on those who are least able to afford.

3.2.1 User Fees

User fees is a particular type of cost sharing in which beneficiaries pay directly (out of pocket) for using health services [UNICEF,1990]. User fees is justified on the grounds that people are willing and able to pay for health services. This assumption has been derived from household or aggregate expenditure survey [De Ferranti, Meyer, 1985]. Initially, user charges were applied to subsidize the services and reduce the over-utilization (Medicus, 1986). It has been proved that primary health care programs cannot be 100% sustainable. It remains a need to review the options for financing the health care programs (Foster 1988, Kanji 1989).

User fee have been considered as the most capable instrument to measure the sustainability, efficiency, acceptability and paving the way for options such as health insurance. The implication of user fees policy highlighted the very important aspects of equity, utilization of health services, improving the health status and potential for revenue generation (World Bank, 1987). It has been argued that the structure of fees provides financial incentives that affect utilization patterns of health facilities by the users and health outcomes and affects how well individuals are insured against the risk of large economic losses associated with unexpected illness [Gertler & Hammer, 1997].

The target objectives of user fees are to improve and strengthen the allocational efficiency like appropriate use of resources within the health facilities. And to ensure the internal efficiencies related to the decentralization of financial decision for funding the specific inputs like drugs and maintenance of equipments and medical supplies, etc. This source of income generate the sufficient revenues to cross subsidize the services for poor and under-served groups of the society [Gertler & Hammer, 1997].

Generally the user fee is discussed as out of pocket expenses by user for seeking health services. But we ignore the opportunity cost (cost of waiting time, cost transportation, loss of wages etc.). The opportunity cost is almost higher than the monetary cost. Some researchers from African countries have found that the opportunity cost to seek the health care almost contribute towards 2-3 days wages of a household. Therefore majority of the lower income groups tend to choose the least expensive source of health care, nearest health facility [Germano Mwabu, 1986].

Several countries have started to develop health financing alternatives. Examples are rural risk coverage with the Thailand Health Card System, User charges in Ghana, prepayment schemes for hospitals in Zaire and Uganda, User charges in Kenya, health service privatization in south Africa, community financing in Senegal, Family saving Schemes in Singapore, revolving drug funds in Nepal, User fees and community health fund in Tanzania (Waddington, et al 1989, Noterman et al; 1995, Price, 1988; Sene, 1986; Phua, 1986; Fryatt et al, 1995; Stormer, 1995).

Zschock (1979) and Prigor (1985) suggested the sources of financing ranging from public sources like general tax, deficit financing, sales tax revenues, social insurance, lotteries betting, foreign aid to private sources which include direct employer financing, private health insurance, charitable contributions, communal self help and direct out of pocket expenditures.

The essential problem is that there is a limit to what can be collected from the taxes without damaging the economy and without coming into conflict with wider objectives of health for all (HFA). There may be room for higher taxes on imported luxuries, but at some point tax revenue is bound to fall if luxury goods are priced out of market. There are administrative difficulties in collecting and managing the more money from income tax. This only leaves open the possibilities of taxes which fall most heavily on the poor. And making the poor, more poorer by taxation could seriously damage their health status (Abel-Smith 1986).

3.2.1.1 Setting up User Fee

User fee should be set out on the principles based on efficiency, equity, and administrative goals. It will help to resolve the issues like reductions in demand due to imposing fees, exemption of selected services from any fees, exempting fees from those unable to pay, leakage/misuse of revenues at certain level (Litvack and Bodart, 1993]. User charges may be raised to the levels within the range perhaps up to the level of the fee charged by the private practitioners, in the majority of cases, it will raise revenues (gross), whether they are being introduced for first time. Because consumers believe on the government facilities due to availability of professional staff, quality of drugs, laboratory and high tech services (Mwabu and Mwanzia, 1995).

The criteria for charging the health services in Tanzania to prevent the frivolous visit of government services and ensure that the subsidized services are available for those who are in real medical need. Most patients should have to pay marginal costs of the provided services because they already paying to the mission and traditional healers (Abel Smith et; al, 1992).

The Bamako initiative in 1987 rests on the belief that people will pay for the drugs. The most powerful argument used by proponents of user charge for health services is that there is a willingness to pay on the part of the consumers. It is argued that people already pay for traditional and private services. However, payment to traditional healers may be in kind, secondly there is no choice. Also people's ability to pay for health care, especially in rural areas, may be determined by the seasonality of health needs as well as cash availability (Kanji,1989).

3.2.1.2 Equity

Equity in health means, that no body should be denied access to basic minimal health care regardless of income, marital status, gender and place of residence (Mooney, 1988). User fee has been considered as a source for providing equitable health services through the improvement of quality and expansion of services at affordable prices (World Bank, 1985 and De Ferranti, 1985).

The function of equity can be defined through price elasticity of demand; how the price of health services effect on the demand, and what is the magnitude of this effect, which income group is more effected; poor, very poor or medium income group and what are the problems of implementing the user fee, from provider and users sides [McPake, 1993]. In public hospitals, governments try to promote equity through subsidizing the public health care system and subsidies are used to keep user charges low so that even the poorest families can afford medical care [Gertler and Hammer, 1997].

For measuring the equity, quality and continuity of care for all income groups, user fee is considered as a financial tool (Yoder, 1989). According to Health et al, increasing the cost recovery through patients pay part or all of their health care costs, is also considered as a way to mobilize more resources to improve equity and increase efficiency. It will encourage to reinvestment through fee revenues into cost-effective health care (Hecht R, Overholt C, Holmberg 1993).

Demand for health care tends to be income elastic, meaning that the more money people have the more they are willing and able to pay for health. Charging wealthier people for

services and then pooling those revenues to subsidize the costs of treating those who least able to pay is an important means of promoting equity. When user fees are spent to expand and upgrade the quality of health services they may actually reinforce demand (World Bank, 1995). Akin (1986) concluded that “ fee system designed with appropriate protection for poor. While collecting much needed revenue from the rich, can greatly improve the fairness of the overall health financing system.”

It has been observed that when user fees introduced in government facilities, the concept of welfare vanished due to the limited access of the users, only those can get benefit from the services who have the ability to pay the fees. The implementation of user fee may force the patients for unwarranted sacrifices (selling land, precious items of household etc.) in order to meet the cost of medical care. Such a tradeoff worsens social welfare because one basic need should not be satisfied at the expense of another (Mwabu, 1990).

The user fee in most public hospitals of developing countries is subsidized through government financial budget, it has been observed that the hospitals are overcrowded with the patients who can be treated at primary level facilities. Similarly, users of higher and moderate-income groups, prefer to visit private consultants as norms of their societies. They pay higher fees for good quality of services to the same providers in private clinics who serves the government facilities. This shift of using services of private providers, leads to the under utilization of hospitals and only low income group (poor) use the health services who are usually unable to pay the fees (FYP, 2056/61).

3.2.1.3 Utilization

In some developing countries, before the implementation of user fees policy, health services were free of charge and utilization rate was very high but as the fees charged in public health facilities, the utilization declined very rapidly (Mwabu, 1995). In other countries, implementation/raise of user fees in government health facilities, reduced the utilization rate by 50% in out patient department (Hussein & Mujinja, 1997). If patients are very sensitive to fee for service, implementation of user fee may reduce the utilization percentage in the public hospitals. Statistical demand studies by Dor, Gertler and van der Gaag (1987) and in Kenya, by Mwabu (1989) indicated that user fees that are high enough

to recover a substantial proportion for providing medical care would directly effect on the reduction of health seeking behavior and entry for low income patients.

Rate of utilization of health services depends on prices and geographical (urban and rural) settings of the users. For the lowest income quintile, utilization reduction in response to price increases has been found to be significant at all prices and became elastic for the higher price ranges. Yoder found that up to 34% of the overall decline in attendance was among patients who previously had paid the least for health care in Swaziland (Yoder, 1989). Similarly, Benyoussef and Wessen found marked difference in health care utilization on the basis of residents in urban and rural areas (Benyousef and Wessen, 19740).

In Nepal, Fryatt et; al (1994), studied a new scheme where patients are charged a fee per item prescribed like consultation, x-ray, laboratory service etc; and found that the average daily attendance in the health post was significantly higher after about 12% decrease in the costs of drugs. User fees directly effects on the decision-making behavior of an individual or household for using modern or traditional health services. Meyer (1985) found that price of health services is always a major concern among those who use modern care. Traditional health services may also be substituted for modern health services because of low price and nearest available health facility. (Stanton and Clemens, 1989).

Chet Nath's studies in Nepal concluded the under utilization of public health services were due to low fee and free drugs. It was often observed that school aged patient visit the health services and takes bulk of medicine without any serious problem. Resultantly, after three to four month, medicine shortage starts and utilization rate goes down because people move to other facilities for taking drugs. To deal with this problems, in some of the districts of Nepal, local interventions to share cost for drugs and effective utilization of health services have been proved in success (Chet Nath, 1999).

3.2.1.4 Quality of Health Services

Quality in health services is an intangible factor which cannot be measured but can be weighted according to the perceptions of user/household who uses the health services and the provider of services. Most of the studies use structural measures of quality, such as the availability of drugs, personnel, physical infrastructure, and equipment (Peaboy et al.1995).

The acceptability of health services to both client and provider is closely related to the quality of available services. This indicator can be assessed through drugs availability, assessment of prescribing practices, evaluation of service protocols and changing in staffing patterns [WHO,1995]. If the perceived quality of care is different between two sectors under the same fee structure, people will migrate to the sector providing the higher quality of care. Similarly, if quality is not good in government facilities, even when the fee is zero or no charges, users prefer to visit private services and pay higher fees due to the perceived quality of services [Bitran, 1989]. Access to health services would not be considered as a quality component because even more accessible health facilities are underutilized because the population is not motivated to use them if they perceive the quality provided is poor (Annis,1985).

Okyere's in Ghana found that when cost recovery policies are introduced, the demand for health services or utilization rate decreased and rate of self-medication increased rapidly. But as far as, quality improved through provision of essential drugs, medical staff and appropriate equipment, the utilization rate increased gradually and services became sustainable [Asenso-Okyere, 1998]. As a result, quality of health services provides a greater freedom of choice to user among providers and higher cost of medical care.

3.2.1.5 Efficiency and Revenue Generation:

The primary objectives for increasing the user fee in hospitals, are to bring several benefits like generating revenues for financially strapped health care facilities. Which may be utilized for more deserving and vulnerable groups of society and establish health services in under-served areas. In hospitals, cost recovery mechanism is expected to increase efficiency because when consumers pay increased fee for services, they respond by reducing unnecessary visits (Foreit-1993). But, this approach will lead to delay in

treatment of illness and towards chronic health problem for those who cannot pay/afford increased fees for service.

Effective implementation of user fees is considered as a crucial factor with regard to the success of the user fees policy. It improves the levels of cost recovery in public health facilities. Administrative capacity plays an important role in implementing the user fees policies through effective planning, organizing and management of the user fee. In 1987, Ghana, achieved the maximum level of cost recovery and generated the revenues for more than 12% through user fee. Vogel showed that there are striking differences between the amount of revenues generated by weak and strong administration in health services (Vogel, 1988). Another strategy in order to improve the cost recovery, is to give incentives to the administrative staff to motivate them towards collection and protection of user fees at health facilities. However, net revenues will only be raised if administration costs of the system are not too high relative to its efficiency in collecting fee (McPake, 1993).

3.2.1.6 Implementation

The most important element in the system of user fee, is to implement the fee effectively through appropriate policies which will improve the levels of cost recovery in public health services. In 1987, Ghana, in African countries, achieved the maximum level of cost recovery i.e 12% through user fee. The success of this achievement is due to effective implementation of user fee and strict criteria of exemption. Stison found the leadership commitment as an essential component for the successful implementation of user charges policy and its effective utilization for quality improvement (Stison, 1984). Gilson studies emphasized on the effective implementation of user fees policy and establishment of a mechanism for ensuring the accountability. It would generate revenues through user fees to achieve equity, efficiency and system sustainability (Gilson, 1997).

3.2.1.7 Exemption

The exemption in fee gives an opportunity to those who cannot pay fee for seeking health care in public health facilities. The degree or level of the exemption is always a question for the policy makers that who should be given exemption in paying fee, what should be the criteria and how we can implement this criteria/policy effectively. Sometimes, the

exemption is only limited for certain age groups and type of services. In Ghana, only antenatal check up and visits of u-5 children were exempted to encourage the safe deliveries and reduce the deaths in u-5 age group. In Benin, where local health committee was left to decide the exemption criteria, only victims of natural disasters and abandoned women were exempted from payment. The exemption from fee, often leads to abuse of system by those who face the least problems of ability to pay (Cross 1986, Vogel, 1988). The reliance on such exemption mechanism depends on who make decisions on behalf of the community and how it works practically. Either it meets the needs of really deserving people (in need) or some special groups (more favorable to decision-makers) (Levy, 1990).

3.2.1.8 Willingness and Ability to Pay for Health Services

The concept of willingness and ability to pay for health services is increasingly considered as the basis for designing the health care financing program and formulate the appropriate policies for effective implementation. Researchers used the different methods according to their focus issues. Every methodology has its own limitation, delimitations and expected biases depending on the research instruments and the sensitivity of the research issues.

Russel et al (1995) argued that that the responses of people's willingness to pay will influence the health seeking behavior, service utilization levels, patterns and revenues collection. In particular, the impact of prices on efficiency and equity on health care will be influenced by people's willingness and ability to pay. It can be assessed by modeling past health care utilization, expenditure and responsiveness to prices or by asking people directly for the maximum amount of money that they would be willing and able to pay for selected health services. It assumes from the beginning that people have had no previous experience of buying the health services which going to be put on the market and instead asks the people about their willingness to pay on the basis of their expectation.

Cross et al (1986) found that, consumers are able and willing to pay for health care. Survey of rural poor in Afghanistan, Yemen Arab Republic and Honduras and experience of drug supply financing schemes in Afghanistan, Haiti and Thailand found that users are willing and able to pay substantial amounts for health care and pharmaceutical products.

Pricor (1987), found In Philippines, more than 89% of the household heads expressed their willingness to participate in health financing schemes. The similar attitude was found in Bolivia, likewise in Honduras where 93% reported that they would be willing and able to pay an average of \$0.5 for the MOH services. 92% were also willing to pay for medication in MOH facilities, although half said they would do so only if drug supplies were improved. Willingness and ability to pay was found to be directly linked to users perceived quality of services in health facilities (Pricor, 1987).

Nougara, et al (1989) in Burkina Faso, found in household surveys that choice for treatment depends on the family's perceptions about the severity of the problem, access to the modern or traditional health facilities or self care (health service) and personal criteria such as age educational level, residence, ethnicity and socio-economic variable such as income, occupation, household size and attitude (family). They found in a representative household survey in a district on the assessment of MCH services, that mothers proved to be quality conscious. The better the equipment and the better trained staff of a given services was, the mothers they used it. Level of care offered in a village was consequently the most powerful determinant of the mothers health care seeking behavior, and the second important determinant of utilization of health care is education.

Similar results have been stated by Kloos et al (1987) from Ethiopia that quality of service and perceived efficacy of care was found to be more important than cost in selection of health service. Thus some traditional healers were sought out even though they charged more than hospitals for certain diseases. In the same study they also found that non use of health care was largely associated with low income level and inability to afford money for the price of care offered. Parker concluded that there are potential resources available to fund the health care in rural communities in developing countries. His important findings are the willingness of families to use the largest proportion of their health care expenditures for the care of children and women even after the introduction of free primary care (Parker, 1986).

3.3 RESEARCH METHODS

This study is a descriptive comparative study of Siraha and Lahan hospitals situated in Siraha district, Nepal. The focus of the research was to assess the user's ability to pay for quality of services. Quantitative and qualitative research techniques were employed such as structured, semi-structured interviews, focus group discussion and participant observation were the key approaches to get the feedback form users and providers.

Structure interview techniques are generally used in various household survey in which family members are asked about their willingness and ability to pay for certain services. Three methods have recently been used in the health system research open ended, closed questions and bidding games. Respondents willingness to pay statement may not be reliable if they have insufficient information about the characteristics of health services being described or if they do not understand the information. Providing information about health service to respondents may be specifically difficult according to the socio-economic environment. To study the issues in health financing, various methods and approaches could be adopted but each have its limitation, biases, strengths and weaknesses.

3.3.1 Strengths and Weaknesses

3.3.1.1 Recall Period.

Recall period is found a major limitation during the household survey and exit interviews for asking what they have paid during the last sickness episode. Koreger identified that "the limited human capability for recalling events that have not been or are not of further importance to the particular individual presents one major limitation to the accuracy of information elicited by the interview." Scott and Amenuvegbo (1990) found that longer the recall period the greater the likely recall error but on the other side a longer period makes it possible to cover a larger sample of transaction in a given field cost.

3.3.1.2 Reducing the Biases

To get responses through structured interview, makes the data analysis feasible; responses can be directly compared and easily aggregated and gives an opportunity to ask many questions in a short time. Respondents answer the same questions and comparability of

responses can be done. The interviewer bias is reduced when several interviewers are asked same questions.

3.3.1.3 Standardised Questions

The standardized wording of questions may constrain and limit the naturalness and relevance of questions and answers. Respondents are bound to fit their experiences and feelings into the researchers categories which may be perceived as impersonal, irrelevant and mechanistic. It can distort what respondents actually mean or experienced by limiting their response choices (Maier B et al. 1994).

3.3.1.4 Semi Structured or Guideline Interview

A guided interview approach provides an outline on set of issues which are going to be discussed or explored during the interview. There is no set of standardized questions are written in advance and the interviewer is required to adopt the wording and sequence of questions to specific respondents in the context of the actual interview (Patton, 1990)

3.3.1.5 Strengths/Weaknesses

Comparability and Comprehensiveness

The semi-structured or guided interviews have to be placed between the interviewees with a questionnaire and the unstructured interview. In this sense they can be understood as a compromise between the two approaches. They are considered very useful for rapid rural appraisal because of their intermediate position and because they are quicker to analyze, as the categories have been developed beforehand. Therefore their strengths lies in the comparability of the data due to the pre-formulated structure. The outline increases the comprehensiveness of the data and makes data collection more systematic for each respondent.

Limit of Choices

The traditional individual interview, which used a predetermined questionnaire with closed-ended response choices, had a major disadvantage. The respondent may be limited by the choices offered and, therefore findings could be unintentionally influenced by the interviewer by oversight or omission. By contrast, non directive procedure being with limited assumptions and place a considerable emphasis on getting in tune with the reality of interviewee. Moreover, the non directive interviews used open-ended questions and

allowed individuals to respond without setting boundaries or providing clues for potential response categories (Krueger RA 1988).

Sequence of Questions

The preparation of questions in advance may lead to questions being outside of or irrelevant to the interviewee's reality. Important and salient topics may be inadvertently omitted. Interviewer flexibility in sequencing and wording questions can result in substantially different responses, thus reducing their comparability, highly trained interviewer is needed (Maier B et al. 1994).

3.3.2 Key Informant Interviews

Key informant interviews approaches have been used in various researches. Key informant are the people who have special position in the community and are looked upon as representatives of the opinions and experiences of a selected group or community. They often see the problems of a group rather than of an individual, making them a very useful group of people to interview. They can be government officials, health personnel , social workers, village leaders, leaders of informal groups, etc (Maier B et al. 1994)..

3.3.2.1 Strengths and Weaknesses

Rapid Appraisal

Key informant interviews are a major tool for rapid appraisal, because they can provide valuable and independent information about a whole community, or a group of people, in a fairly short period of time and without a large group of people being necessary for the study.

Possible Biases

The local key informants are often better-off ,better-educated and more powerful members of the community, which may introduce a bias. They may well not represent the views of the more vulnerable groups of the society. Therefore, cross-checking by few interviews with members of the vulnerable groups is necessary to reduce the possible bias. Teachers or social workers have a more independent view than local leaders (Maier B et al, 1994).

3.3.3 Focus Group Interview/Discussion

Focus group interview technique evolved to get real picture through interaction (Krueger

RA, 1988). Focus-group interviews are especially helpful for gaining insight into people's perceptions, attitudes, opinions, behavior and experiences. They can also help to assess the acceptance of concepts, the acceptance of messages, how information being passed on and where incentives or resistances lie (Maier B et al.,1994). The participants are typically a relatively homogenous group of people who reflect their opinion about a topic/issue (Patton M Q, 1987).

3.3.3.1 Strengths and Weaknesses

Efficient Technique

Focus group interviews have several advantages when used for the program evaluation purposes. It is a highly efficient qualitative data-collection technique. In one hour the evaluator can gather information from eight people instead of only one person. Thus the sample size can be increased significantly in an evaluation using qualitative methods through focus group interviewing.

Group Dynamics

Focus group interview also provide some quality controls on data collection in that participants tend to provide checks and balances on each other that weed out extreme views. The group's dynamics contribute to focusing on the most important topics and issues in the program, and it is fairly easy to asses the extent to which there is a relatively consistent, shared view of the program among participants.

Response Time

The amount of response time to any given questions increases considerably by having a number of questions that can be asked is limited. With eight people in an hour, it is typically possible to ask no more than ten major questions. Only those people participate who willing to verbalize their opinions, therefore it is important to manage the discussion so that it is not dominated by one or two people (Patton M Q, 1990).

3.3.4 Participant Observation

It is the classical method of ethnography, the observer gathers data by participating in the daily life of the group or organization he studies. The observer enters into the real conversation/situations and discovers the interpretations of the events. Recording, may be unsystematic and during the process of observing, an analytical framework for evaluating

the data is established.

3.3.4.1 Strengths and Weaknesses

Participation in the Situation

This technique provide a definition of how reality is defined by the population, or by the service to be studied, through the participation of the observer and through the open character of the technique. Since the observer becomes part of the situation to be studied, he/she can experience the underlying motives and emotions of the group to be studied.

Result Repetition

The active involvement of the observer, can lead to over-involvement, as the observer loses a critical distance from the situation. It is almost impossible to check on the findings by repeating the study (Maier B et al, 1994).

3.3.5 Secondary Data

Secondary data is available from other sources and may come in different forms: Revision of document, reports, handbooks, meeting minutes, project documents, census reports, etc. which according to the research subject can serve as secondary data (Mc. Neil, 1990, Bell 1991). They are important for the background information of a historical review and for triangulation.

3.3.6 Triangulation

Triangulation is one form of validation. The term originated from navigation where position is defined by different reference points. In qualitative social science research two types of triangulation are used the combination of methodologies (e.g. quantitative and qualitative) and the combination of different techniques with the methodology (Lamnek, 1989).

4. METHODOLOGY

This chapter describes the restatement of problem, context of the study, study questions and objectives, study location, study population, methods of data collection, organization, instruments, limitations to the study , some possible biases and assumptions.

4.1 RESTATEMENT OF THE PROBLEM

The service utilization rates in Siraha and Lahan hospitals have been considerably low; less than 3% of the population, from 115 health facilities (HP, SHP, PHCC) visit these hospitals. Patients pay registration fee Rs. 5/- (US\$0.14) which constitutes only 3-4% to the total operating cost of the hospitals. Low cost recovery and utilization of hospital services, might be that patients perceive the quality of services in hospital is not good and they visit to private clinics, traditional healers due to good consultation and less paying for services. According to the 1997/98 report, these hospitals collected Rs. 340,000(US\$4860) from user fee and stall rental. (DHC F.Y Plan 2054/055-Nepal). Due to the insignificant cost recovery in Siraha and Lahan hospitals, quality of health services could not be improved and utilization rate has been declining. There is still an enormous potential available to raise the funds if the affordable user fees is introduced. It will improve the quality of services and access to the users who are not utilizing the health services in these hospital.

4.2 CONTEXT OF THE STUDY

The economic crisis in developing countries and low resource allocation for the social sectors like health and education have led to inaccessibility, low quality and low availability of the services. High cost of treatment and appropriate interventions are leading to economic challenges for future. The cost recovery in public hospitals is very low and most of the public health budget moves to the secondary care. Under the circumstances, it is difficult to achieve the goal of health for all with scarce resources. To provide health services and improve the health status of the communities, developing countries are implementing the alternative strategies to finance health sector through community involvement and participation. Some countries have already started implementing

instruments of cost recovery such as user fees, drug revolving funds, and community based health insurance schemes.

4.3 RESTATEMENT OF THE CONTEXT AND NATURE OF THE STUDY

This study was initiated on the proposal offered by Primary Health Care Project, GTZ, Nepal. PHCP has been working in Siraha and Dhading districts with an objective to strengthen the district health system. The primary objective of their interest in this research to get first hand information from the users about the quality of services and the factors influencing their ability to pay fees. The secondary objective was to incorporate the findings/conclusion in district health planning for next five years being assisted by GTZ at the ministry level. In Siraha District, a descriptive quantitative study was carried out in Siraha and Lahan hospitals which offer same level and range of services.

4.3.1 Study Location

1. Siraha Hospital
2. Lahan (General) Hospital

4.3.2 The Logistics

The proposal with structured interviews and guidelines for key informant interviews were prepared and discussed with the thesis tutor before leaving to study area. The shortcomings were observed and necessary addition and deletions were made with the help of field tutor. PHCP, GTZ, Nepal provided the logistics in Siraha. Aga Khan Foundation (AKF) Pakistan granted the funds to complete this research work in Nepal.

4.3.3 Study Population

This study was conducted in the outpatient department of Siraha and Lahan hospitals. To answer the study questions, a relevant study population was selected. The study population for exit interviews was adult patients including male and females who visited the hospitals during the study time. The respondents were randomly selected from the users when they completed all the procedures like registration, consultation with doctor, laboratory examination and collection of medicine from the pharmacy.

a) Selection Criteria for Exit Interviews

The selection criteria for being included in the exit interview process from the study population among the out patients in Siraha and Lahan hospitals was based on :-

- Adult male /female patient
- Completed the visit of OPD
- Willing to respond the questionnaire

b) Key Informant Interviews

The selection of key informant was made on the basis of local resident, had a special position in the community and can be assumed to have important knowledge about the study topic. Similarly, the person who were closely involved in the management and administration of these hospitals. The key informant interviewers were Chief f Development Officer, Chairman District Development Committee and District Health Development Board, District Health Officer, Medical Superintendents, Chairman , Member Finance, Member Secretary of Hospital Helping Committees.

c) Focus Group Discussions

The selection of focus group for discussion was based on the hospital records. The data on utilization of services was reviewed and analyzed. Four groups were identified on the basis of utilization, highly, lower, moderate use. The other two groups were selected on the socio economic conditions of the communities which were from depressed casts and vulnerable (women) community in the district.

4.3.4 Research Question

Are users of Siraha and Lahan hospitals, willing and able to pay user fees provided that quality of services would be improved.

4.3.4.1 General Objective

- 1. To assess the users ability to pay fees for services.**
- 2. To assess the users perceptions on quality of health services**

4.3.4.2 Specific Objectives

- 1.1 To asses the users perceptions on willingness and ability to pay fees for services.
- 1.2 To document the users perceptions on quality of services.

2.1 To elucidate the views of service providers about future prospects for revenue generation in the hospitals.

4.3.4.3 Selection of the Research Site and Time Frame

Initially, the study proposal was aimed to compare the quality of services and users ability to pay in Dhading and Siraha district hospitals. Due to the time limitation and logistic problems, it was discussed with host tutor and decided to limit this study within two hospitals of Siraha district. The other reason for selecting the Siraha district was, the PHCP, GTZ has already been started their activities in the district. Siraha and Lahan hospitals have almost same range of services and infrastructure. The selection of research sites helped to get information from the users of different socio economic backgrounds living in the research area. The field study was carried out in almost seven weeks starting from 2nd of May to 18th of June, 2000. Detailed work plan is attached in the annexure-

4.3.4.4 Study Design

This study is a descriptive, quantitative and qualitative cross sectional study. Structured interviews of users at exit poll were conducted in Siraha and Lahan Hospitals. The data was collected on socio-economic variables and users willingness and ability to pay for health services. To get more feedback from the communities of both municipalities (Siraha and Lahan), focus group discussions were also conducted.

4.3.4.5 Sample Size

The sample was selected conveniently in Siraha and Lahan hospitals among the users of OPD. It was discussed with the host tutor and decided that at least 100 interviews will be conducted in two hospitals for the data collection and reducing the chances of error. Observing the patient flow in hospital, it was decided that average six patients will be interviewed every day. Every third patient will be asked for interview on voluntarily basis and in case of reluctance or absence, the next patient will be interviewed.

Hospital providers were selected on the basis of their key position in the hospital, like medical officer, laboratory in charges, staff nurses and x-ray technicians. Due to the limited number of the providers, only 10 providers were asked and interviewed on voluntary basis.

To get the feed back from community, four focus groups were selected on the basis of utilizing health services provided in the hospital. Similarly, it was discussed with the local leaders about the depressed and vulnerable group in the district and they were approached. They were asked about the topic and after taking their consent, discussions were arranged. To observe the indepth situation in the hospitals, authors participated in two observations, one in each hospital.

Key informants were selected on the basis of close involvement in the management and administration of these hospitals. They were reliable and respectable personnel in the district. It was discussed with the management team of GTZ, Siraha and they identified the key informants according to my research topic.

Table 2: Research Techniques

Sr. #	Research Technique	Numbers
1	Users interviews in Siraha Hospital	49
2	Users interviews in Lahan Hospital	41
3	User interviews at Private clinics	08
4	Focus Group Discussion	04
5	Key informant interviews in Siraha and Lahan	08
6	Interviews of Health Providers	10

4.3.5 Method of Data Collection & Procedures

The following methods for data collection were used in Siraha District. Structured, semi-structured interviews, focus group discussions and participant observation were the key approaches. These are discussed as follows:-

4.3.5.1 Exit Poll Interview

Data was collected through structured questionnaire from the patients at the exit poll because they had a chance to use the health services and observe the quality. The questionnaire was drafted into English and it was translated into Maithli language with the help of local interviewers. Respondents were selected by the random selection method. Pre-numbered color cards were distributed among patients before consultation and asked to see

the interviewers at exit point. It took 15-18 minutes to administer one questionnaire (See Annex-).

4.3.5.2 Focus Group Discussion

Group for discussion, were selected on the basis of utilization of hospital services by categorizing as higher, lower users, depressed cast “ Tatma and vulnerable (women) groups. The users of rich community Bhawan Chatri who have the higher ability to pay for services and other group who is less using and has less ability to pay for services, participated in the discussions. They were asked that what they would like to pay if the quality of services was improves according to their needs.

In Siraha and Lahan, the number of participants were limited for focus group discussion needs to be not more than 10 participants of almost same age group, social and economic background and participation on volunteer basis. But due to the rural setting, the number of participants were more than 10 in depressed Tatma group and women group.

4.3.5.3 Key Informant Interviews

Selection of key informant was made on the basis of local residence, had a special position in the community, to have important knowledge and closely involved with the management and administration of the hospitals. District Coordinator of GTZ, Siraha helped to identify organize meetings with the key informants in Siraha and Lahan municipalities. The key informant interviewers were as follows:

- a. Chief Development Officer of Siraha District
- b. Chairman District Development Committee and District Health Development Board
- c. District Health Officer, Siraha Hospital
- d. Medical Superintendent of Lahan Hospital
- e. Member Finance of Hospital Helping Committee, Siraha
- f. Member Secretary of Hospital Helping Committee, Siraha
- g. Chairman Hospital Helping Committee, Lahan
- h. Member Hospital Helping Committee, Lahan

4.3.6 Selection and Training of Interviewers

One female, one male interviewers and one male interpreter were selected from the local community on the basis of their previous experience, qualification and fluency in local language (Maithali). Interviewers were well known in the community and were willing to work as interviewers for this research. The interviewers were given training for two days on interviewing techniques, inclusion and exclusion criteria and recording data through structured questionnaire. Interpreter was trained to record the community perception and interpret in English language. They were specially trained in asking sensitive questions like house hold income, ability to pay in public hospital and sources of money to pay for health care.

4.3.7 Pre-testing the Questionnaire

The initial draft of the questionnaire of the exit poll interview was discussed with local tutor and interviewers. Necessary amendments were made according to the local needs and cultural sensitivity. Questionnaire was translated into Maithli language and to reduce the interpretation errors, it was retranslated from Maithli to English. After the two days training of interviewers, they were sent to Siraha hospital to test the questionnaire and practice the interview techniques. Each interviewer was asked to practice at least five questionnaires in the exit point of the hospital. To get feed back and pilot the questions appropriately, interviewers were informed about the research objectives. After analyzing the results of the pretest, required changes, modification were made accordingly and final draft was printed for data collection.

4.3.8 Feed Back to the Community

The data which was collected from the users at exit poll and from providers in study area was presented to the community in the district hospital Siraha, Users of different casts and ethnic groups, para-medical and medical staff of the district health office were invited to share the preliminary findings of this work. Community members gave their opinion and appreciated the preliminary results / findings. One of the providers, was not agree with the finding about the shortage of medicine for the OPD. It was also recognized that due to the lack of manpower in the medical field, it is difficult to provide health services to the

community according to the standards norms. However, they were hopeful that within few years they will get more medical manpower from the medical colleges in the country.

4.3.9 Minimization of Errors

By giving orientation and proper training to the interviewers, author tried to minimize the non sampling error such as reporting and recording the data. Similarly, authors himself entered the data in EPI info and verified the data before printout.

4.3.9.1 Data Analysis

The information collected from the exit poll interview was analyzed in EPI6 program. Information about willingness and ability to pay for one episode of sickness are summarized in mean, median, averages and proportions. The data obtained from the key informants were first translated into English as it was in local language. The obtained data / responses from key informants interviews were then grouped according to specific objectives of the study.

4.3.10 Ethical Consideration

At exit poll, respondent consent was asked verbally before starting the interview and then interview was conducted. Interviewees were assured that all information will be kept secured and confidentiality will be maintained at all levels.

4.4 STUDY LIMITATION

a) Language Problem

The interviews were conducted in the local language “ Maithali “ which was not understandable to the researcher. Translation of all the interviews was not possible and the author had have to rely on the interviewers. During the focus group discussions, interpreter was writing all the comments, so if something was found unimportant by the interpreter, he may have miss it.

b) Recall Bias

As the exit poll, users were asked about their expenses during the last episode of sickness. It was observed that during the interview that it is difficult to recall the minor cost for seeking health care.

c) Information Bias

During the interviews, most of the people wanted to share information about the loss of their working income. Similarly, users were reluctant to tell about the income of their household.

d) Respondent Bias

It was observed during the interview with females, they preferred letting their male partner answer. Which does not reflect the real situation and respondent give his own views about questions.

e) Selection Bias

The users exit interviews and focus group discussion were selected purposefully without universal sampling method due to the time and logistics constraints. So, it does not reflect the real situation of the whole district. The bias occurred because of the selection of the respondents from selected groups whom I interviewed.

f) Prestige Bias

During the key informant interviews, most of the respondents were biased due to their professional prestige and they did not tell the realities even they know the real situation in the district.

g) Can Biases affect the study results?

Patient who were hesitant to participate the interviews or who referred the responses to their companion and who did not responded to some questions, would of course have affected the representativeness of out-patients in findings and conclusion.

Keeping in view the interviewers information bias which is the most sensitive and crucial element that could grossly affect the findings and conclusions. Due consideration had been given before and during the data collection process to minimize the effects on whole study.

h) Limited Representativeness

The results of the study can not be generalized in Siraha district because the sample was conveniently selected and the information was obtained from exit interviews from self selected respondents.

i) Time Limitation

Studies about the users willingness and ability to pay needs a long time to cover all aspects

of users perception on quality of available services and how user is satisfied with the services because the outcome of the health services is also a part of the quality. Similarly, to assess the users ability to pay is quite difficult because more often users give a general estimate during the exit interviews in a short time period. So this study covered only the selected aspects within this research time period.

j) Limited Resources

Due to limited resources, it was difficult to expand the study in the whole catchment area to get feedback from the non users of hospitals through household survey method.

k) Translation of discussion

Respondents for structured interviews and some participants of focus group discussions were bit shy. This might be due to the prevalent culture and educational status or they might be afraid in the hospital compound to speak up freely due to the influence of the providers.

4.5 LIMITATION REGARDING WILLINGNESS AND ABILITY TO PAY

This research was conducted at a point of time, therefore it reflects the seasonal willingness and ability to pay for one episode of sickness in Siraha and Lahan hospitals in Nepal.

- The assessed willingness and ability to pay is the maximum amount that can be contributed by a patient/user for the treatment of sickness.
- The assessed willingness & ability to pay is the user perception to pay on the conditions if the quality of services will be provided as he/she finds in other hospitals (private /public, where last visited).

4.6 ASSUMPTIONS

- It is assumed that government will provide essential drugs and adequate human resources for improving the quality of services in the district.
- To increase the efficiency of the staff, health providers will be given incentives according to their working efficiencies.
- District Health Financing System will be strengthened in the area.

The newly constructed building and instrument will be handed over to the providers to ensure the appropriate delivery of health services.

The budgeted funds will be released according to the line items and on time.

5. FINDINGS

The descriptive study was conducted in Siraha and Lahan hospitals of Siraha district, Nepal. The specific objectives of the study were to assess the user's ability and willingness to pay fees for services, users' perceptions on quality of services and elucidate the views of service providers for revenue generation in the hospitals. The result chapter describes the quantitative and qualitative data of two hospitals, collected from the selected users, key informant and focus group discussions. The findings are presented in the following sequence through tables and graphs.

Table 3 shows the socio demographic characteristics of the study area in Siraha district, Nepal. In Siraha hospital, 49% respondents were in the age of 10-30 years, 45% in age group 30-60 years and only 6% were in above the age of 60 years. In Lahan hospital, 61% were reported within the age of 10-30 years, 39% in age group 30-60 years and one respondent reported above the age of 60 years. In Siraha, Male and female respondents were in the same percentage while in Lahan male respondents were 37% and female respondents were 63%. In Siraha, 86% respondents were married, 8% were unmarried and only 4% were widows. In Lahan hospital, 80.5% were married, 12.2% were unmarried and 7.3 were widows. Educational level of the respondents in Siraha was quite similar to Lahan hospital.

Table 3: Characteristics of Respondent for Exit Poll Interview

Socio Demographic Characteristics	Siraha Hospital		Lahan Hospital	
	Frequency	%	Frequency	%
Age				
10-30 Years	25	49%	25	61%
30-60 Year	22	45%	16	39%
Above than 60 Years	3	6%		
Sex				
Male	50	50%	15	37%
Female	50	50%	26	63%
Marital Status				
Married	43	86%	33	80,5%
Unmarried	4	8%	5	12,2%
Widow	2	4%	3	7,3%
Educational Status				
Primary	5	10%	4	9,8%
Middle	3	6%	5	12,2%
Secondary	4	8%	4	9,8%
Campus/University	7	14%	6	14,6%
None	30	63%	22	53,7%
Occupation				
Peasant	24	51%	41	61%
Business	4	8,5%	10	15%
Labour	6	12,8%	10	15%
Private Service	5	10,6%	3	4%
Public Service	5	10,6%	3	4%
Student	3	6,4%	0	0
Religion				
Hindu	47	96%	39	95%
Muslim	2	4%	2	5%
AVERAGE FAMILY SIZE	6.5	-	7.1	
Monthly Income				
500-1000	4	11,4%	2	6,1%
1100-2000	13	37,2%	5	15,1%
2100-3000	9	25,8%	8	24,2%
3100-5000	5	14,3%	11	33,4%
5100-10000	3	8,6%	7	22,1%
10000-12000	3	2,9%	0	0

5.1 FINDING ABOUT THE WILLINGNESS AND ABILITY TO PAY

5.1.1 Source of Income of the respondents

In Figure 1.1, respondents in Siraha hospital, reported that 46% depend on agriculture, 13% laborer, 11% were public employees and only 4% reported with more than one source of income (agriculture and public service). In figure 1.2, In Lahan, 62% of respondents reported that agriculture is the main source of their income. 16% laborer, 15% have had their own business, 4% were in government employment and 4% were in private service. In Siraha district, %age of respondents dependent on agriculture and business was higher as compared to the respondents in Lahan. In public service, respondents of Lahan hospital are in higher percentage than Siraha.

Figure 1: Occupation of the Respondents in Siraha Hospital

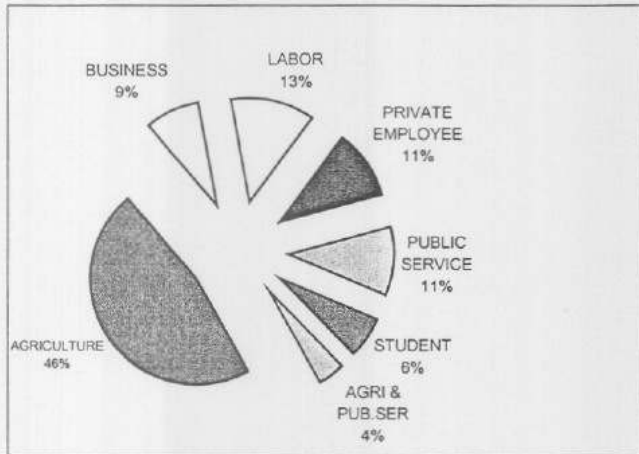
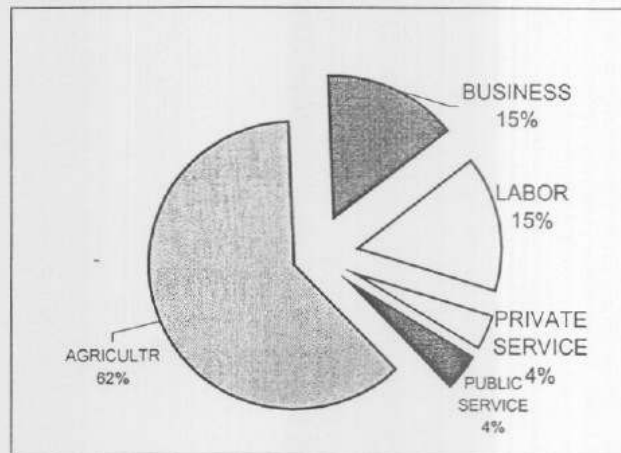


Figure 2: Occupation of the Respondents in Lahan Hospital



5.1.2 Loss of Working Days Due to Illness - Siraha and Lahan Hospital

Table 4 shows that in Siraha Hospital, 69.5% interviewees reported, no loss of working days due to current illness. 22.5% reported loss of 1-30 working days, 6% with two months and 2% reported loss for five months due to illness. Table 5 shows, in Lahan hospital, 55% respondents, reported that they have had no loss of working days due to sickness, however 37.5% responded for 1-15 days working loss. Only 2.5% responded, working loss for more than 100 days.

Table 4: Loss of Working Days due to Current Illness: Siraha Hospital

No. of Working Days Lost	Freq.	Percentage
No Loss	34	69.5%
1-30	11	22.5%
30-60	3	6%
>100	1	2%
Total	49	

Table 5: Loss of Working Days due to Current Illness: Lahan Hospital

No. of Working Days Lost	Freq.	Percentage
No Loss	22	55%
1-30	15	37,5%
30-60	2	5%
>100	1	2,5%
Total	40	

5.1.3 Monthly Income of Respondents in Siraha and Lahan Hospital

Fig. 3 shows the range of monthly income of respondents in Siraha hospital. 74% of the respondents reported their monthly income ranging for NRs.1000-3000, 14% with NRs. 3000-5000 , 3% with NRs. 5000-8000 and 9% reported with NRs. 8000-12000.

Fig. 4 shows the range of monthly income of interviewees in Lahan Hospital. 37% of the respondents reported their monthly income ranging from NRs.1000-3000, 27% with NRs. 3000-5000 , 12% with NRs. 5000-8000 and 24% reported with NRs. 8000-12000.

Figure 3: Monthly Income of Respondents in Siraha Hospital

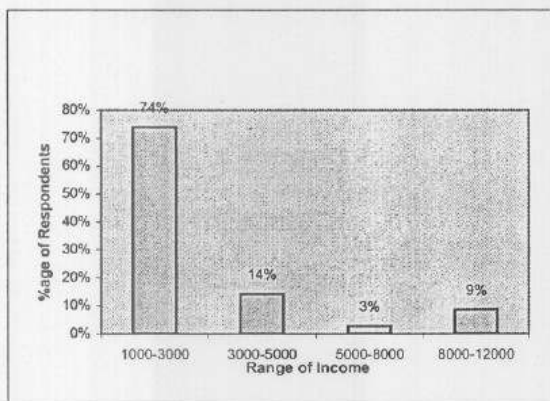
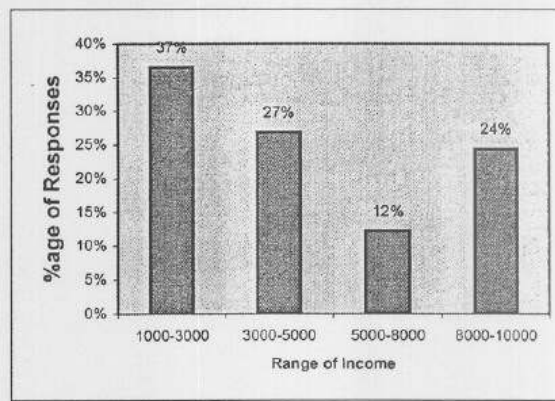


Figure 4: Monthly Income of Respondents in Lahan Hospital



5.1.4 Loss of Working Income Due to Illness – Siraha and Lahan Hospitals

Table 6 shows the results of Siraha Hospital, 49% of the respondents were still working during the illness and reported no loss of working income. 28% interviewees reported a loss of working income ranging from NRs.40-100, 4% with loss for NRs.101-200, 6.1%

for loss of working income ranging from NRs.401-600 and 4% reported with loss of income for NRs.601-1000 due to illness.

Table 7, shows; in Lahan Hospital, 37.5% have no loss of income due to illness, while 29,5% reported with loss of income ranging from NRs.40-100, 15% of with a loss of NRs. 101-200, 10% reported a loss of NRs. 201-400. Similarly, 5% reported a loss of working income for NRs.401-600 and only 2.5% responded that they lost their working income ranging for NRs. 601-1000.

Table 6: Loss of Working Income due to Illness: Siraha Hospital

Loss of Working Income	Freq.	Percentage
0	24	49%
40-100	14	28%
101-200	4	8%
201-400	2	4%
401-600	3	6,1%
601-1000	2	4%
Total	49	

Table 7: Loss of Working Income due to Illness: Lahan Hospital

Loss of Working Income	Freq	Percentage
0	15	37,%
40-100	12	29,5%
101-200	6	15%
201-400	4	10%
401-600	2	5%
601-1000	1	2,5%
Total	41	

5.1.5 Average Expenses on Treatment During Last Episode of Sickness

Fig. 5 shows that 67% of the respondents spent NRs. 100-1500, 6% spent NRs. 1500-3000, 11% spent ranging from NRs. 3000-6000 and 6% reported in rest of three categories that they paid NRs. 6000-10000, NRs.10000-15000 and NRs. 15000-40000 in last three categories for seeking health care during the last episode of sickness.

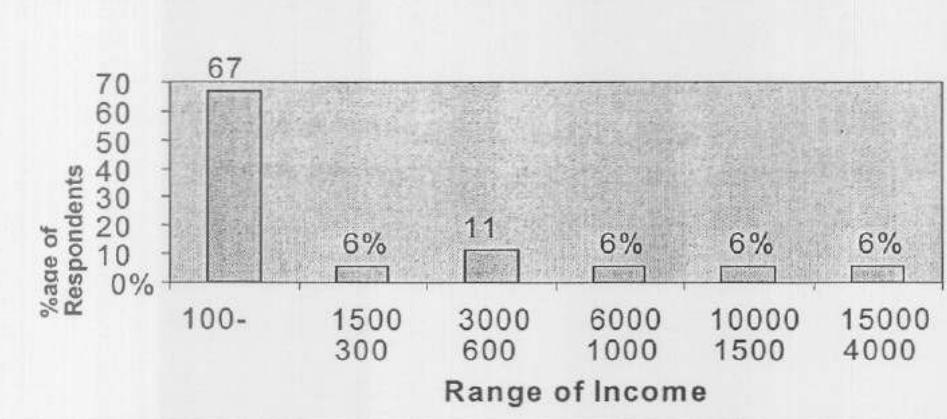


Fig. 5: Amount of Money spent During the Last Episode of Sickness (of Siraha Hospital)

5.1.6 Average Expenses on Treatment During Last Episode of Sickness

Fig. 6 shows that 72% of the respondents spent NRs. 100-1500, and 10% spent NRs. 1500-3000, 9% spent ranging from 3000-6000 and an equal 9% reported that they paid NRs. 6000-10000 for seeking health care during their last episode of sickness.

One housewife during focus group discussion reported that “ last year, my son had sever diarrhoea and I took her to the doctor in Siraha hospital but he could not treat him, then I took my child to a private hospital in Kathmandu where I paid almost NRs. 15000 for the treatment and transportation.”

One of the key informant of DHDB reported that in the hospitals, we don't have facilities for minor operations and we refer them to zonal and regional hospitals to Rajberaj, Dharan and Janakpur for minor surgeries. Where patient pays higher cost of treatment including travel, hospitalisation and opportunity cost of escorting the patient. The major lacking is our hospitals don't have technical manpower and medical equipments/instruments.³

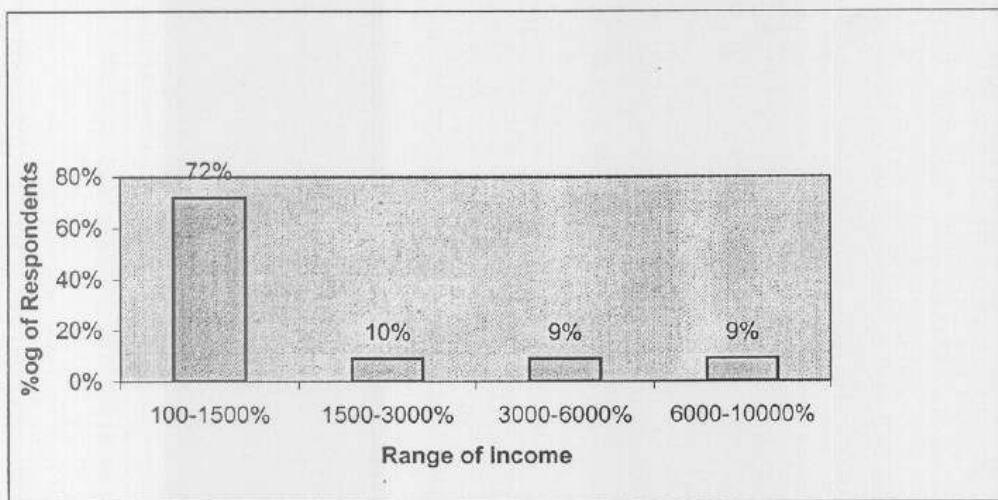


Fig 6: Amount of Money Spent during the Last Episode of Sickness (Respondents of Lahan Hospital)

³ Member of District Health Development Board, Siraha

5.2 FINDINGS ON QUALITY OF SERVICES PERCEIVED BY THE PATIENT

5.2.1 Respondents Perception in Siraha Hospital

Fig. 7 shows the trends of responses on indicators of quality of services in Siraha hospital. 83.7% respondents reported that they did not get any medicine from the hospital. Only 16% got the medicines from the hospital. 60% responded that they did not get laboratory test from the hospital. 51% of the respondents were satisfied and 49% were not satisfied with the waiting time. 86% respondents were satisfied with the health personnel and 14.3% were not satisfied. 62% of the interviewees reported that they did not get the treatment according to their expectation.

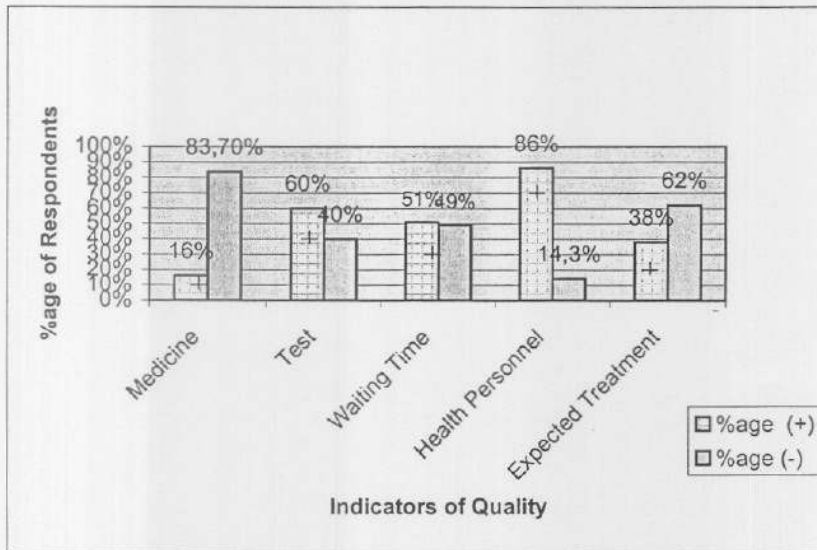


Fig 7: Quality Perceived by the Patients in Siraha Hospital

5.2.2 Respondents Perception in Lahan Hospital

Fig 8 shows 90.2% respondents reported that they did not get the medicine from the hospital. Only 10% got the medicines from the hospital. An equal percentage (50:50) of respondents received the laboratory tests from the hospital. 55% respondents were not satisfied with the waiting time and 45% were satisfied with waiting time to see the doctor. 73% respondents were satisfied with the attitude of health personnel and 27% were not satisfied. 80% of the interviewees reported that they did not get the treatment according to

their expectation and only 20% got the treatment according to their expectations.

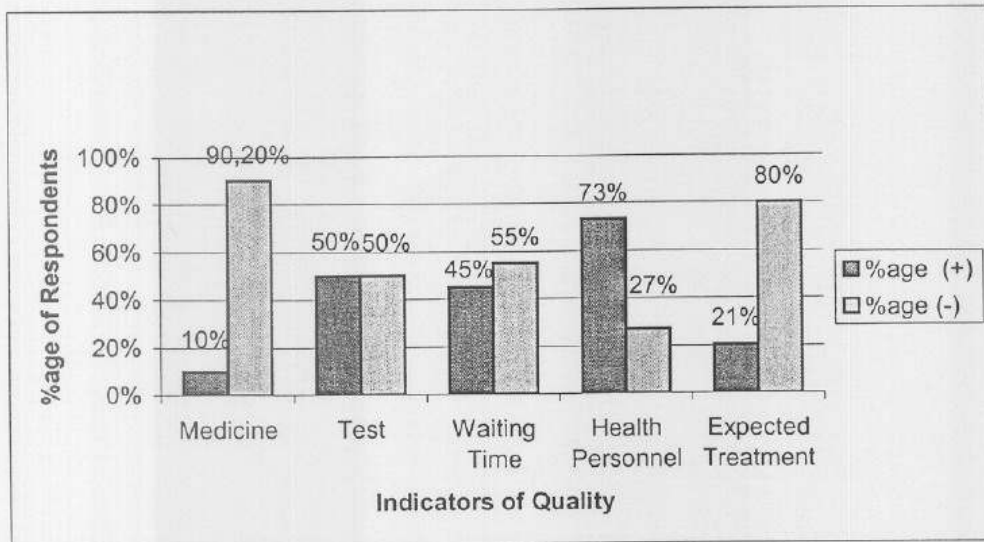


Fig. 8: Quality Perceived by the Respondents in Lahan Hospital

Key informants reported that the medicine in both hospitals is inadequate in most cases and patients have to purchase the medicine from outside the hospitals. The quantity supplied by the government is not sufficient for the whole year. It runs short after few months and thereafter user revenues is used to purchase the medicines from open market.⁴

One of the interviewee from administration department, reported that the budget for medical supplies for health post is used on hospital which increases the problems in health post and sub health posts. Resultantly, patients have to come to hospitals for drugs and they have to pay higher cost in terms of traveling expenses and time factor⁵.

One women in focus group discussion reported that “ doctor asked me to come in his private clinic because he has no time to see her in the hospital.”⁶ While, two members of depressed community reported that they prefer to visit private doctors in the afternoon because they are not satisfied with the quality of consultation in the public hospitals.⁷ One

⁴ Memembers of the hospital helping committees of Siraha and Lahan Hospitals

⁵ Incharge of administration and accounts departments

⁶ Member of the Vulnerable group in Siraha community

⁷ Members of Depressed Tatma Group

community leader reported that doctor gives only 1 minute to a patient and in private clinic more than ten (10) minutes.⁸

Through participant's observation, it was found that official time for doctors is supposed to be available for atleast six hours a day. But, in Lahan and Siraha hospitals, doctors serve almost for 3 hours a day and they check the patients in their private clinics. The table (1.9) shows the actual time spent in hospital and allocated time for official duty.

Table 8: Time spent by the Medical Officers In Siraha & Lahan Hospitals

Official Time in Hospital	8:00 AM – 2:00 PM (6 hours daily)
Actual serving Time	9:45 AM – 12:45 7:00 PM – 7:30 PM = 3 ½ hours
Average Time Per Patient	1 Minute and 30 Second
Time to Private Clinic	7:30 AM – 9:30 AM 1:00 PM – 8:30 PM = 9 ½ hours

One member of the HHC reported that “ I have asked to medical superintendent to make sure the timely refilling of oxygen cylinders to deal the emergency patients. But for a long time, he did not take any notice and now I will ask him in the meeting, he will have to justify himself.”⁹ It was observed by the author that the furniture fixture and medical equipments were stored on roof of hospital under open sky. Due to heavy rains, the furniture and equipment were rusted and are almost useless.

It was observed by the author, in delivery room, the postnatal beds and delivery tables were full with blood spots and there was no proper light. The instruments and equipments were dirty and un-sterilized which cannot be used for delivery procedures. The operation theatre was in worst condition, operation tables were not working properly.

⁸ Community leader in Lahan

⁹ Treasurer of Hospital Helping Committee.

5.2.3. Traveling Time for Reaching to Hospital

Table 1.12 shows that 16% of the respondents reported that they spent almost one hour to reach hospital and maximum of 27% reported they spent more than two hours to reach hospital. In Lahan, 11% reported that they spent more than two hours to reach hospital.

Table 9: Travelling Time To Reach Siraha and Lahan Hospitals

Siraha Hospital			Lahan Hospital		
Travel Time (min)	Freq	Percent	Travel Time (min)	Freq	Percent
5-15	8	16%	5-10	8	18%
15-30	5	10%	15-30	11	25%
30-45	7	14%	30-45	2	5%
45-60	8	16%	45-60	5	11%
60-90	7	14%	60-90	5	11%
90-120	1	2%	90-120	8	18%
120-180	13	27%	120-180	5	11%
Total	49	100%	Total	44	100%

5.2.4 Preference to Exchange Precious items for Health Emergencies

Fig. 9 shows the results reported by the respondents in Lahan Hospital. 27% will prefer to exchange their jewellery (precious item) in case of health care emergencies. 37% will prefer to sell their farm, 20% will sell the stock of food and 9% will prefer to use their savings.

Fig. 9: Preference of Exchange for Health Emergencies in Lahan Hospital

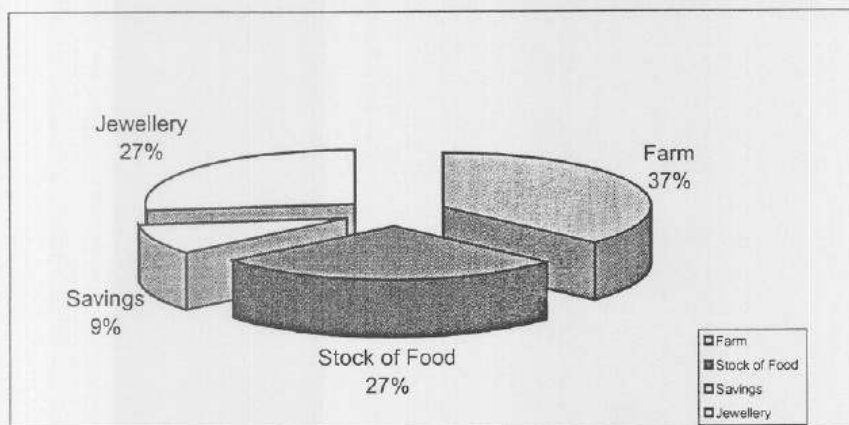
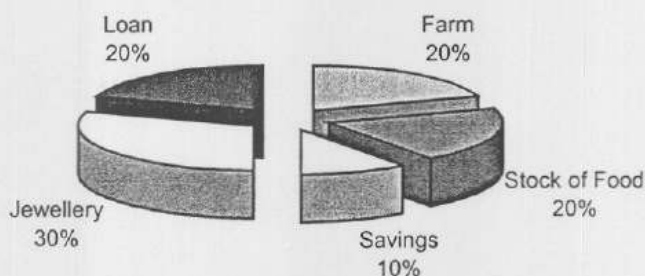


Fig. 10 shows respondents reported that 30% will prefer to exchange their jewellery (precious item) in case of health care emergencies. 20% would prefer to take loan, 20% will prefer to sell farm, 20% will sell the stock of food and 10% will prefer to use their savings.

Fig. 10: Preference of Exchange of Precious Item for Health Care (Respondents of Siraha Hospital)



5.3 FINDINGS ABOUT USERS ABILITY TO PAY FOR HEALTH SERVICES

5.3.1 Sources of Income and Ability to Pay

Fig. 11 shows the respondents ability to pay for health services in Siraha hospital on the basis of their source of income. 32% respondents from agriculture community responded that they will be able to pay 10-60% and 7% will pay 60-100% of total which they paid during their the treatment of last illness. 2% respondents from business community, reported that they will be able to pay 10-60% and 2% will pay 60-100% of total what they have paid during their last episode of illness in private health facility. 6% respondents who were government employees responded for their ability to pay 10-60% and other 2% will pay 60-100% expenses. 1% respondents who were working in private service, responded that they will be able to pay 10-60% and 2% will pay 60-100% of total what they paid for the treatment of last illness. 6% respondents from labourer class, responded to be able to

pay 10-60% and 3% will pay 60-100% of total what they have paid during their last episode of illness in private health facility.

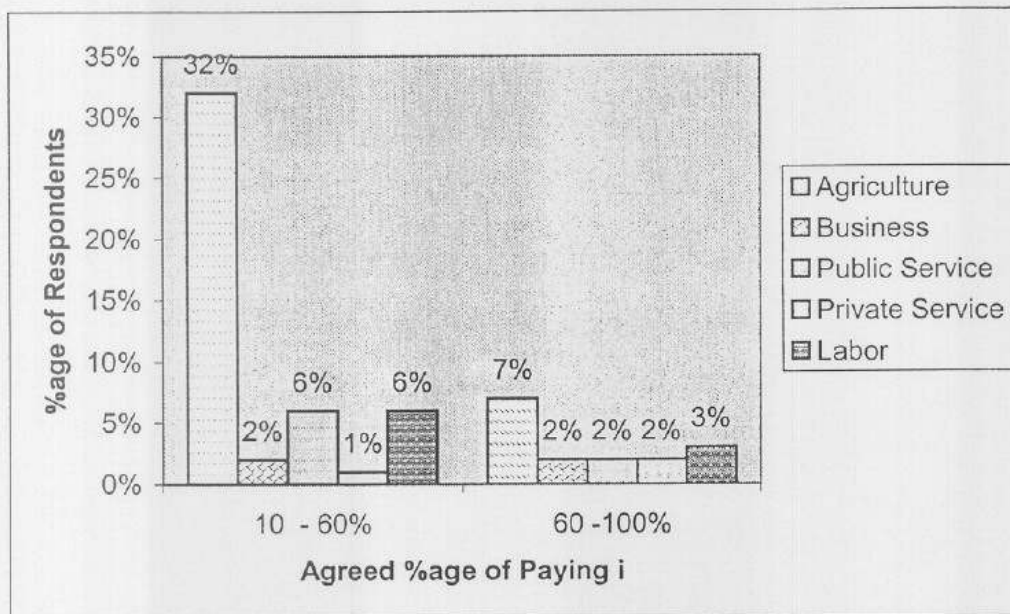


Fig. 11: Sources of Income and Ability to Pay in Siraha Hospital

Fig. 1.12 shows the respondents ability to pay for health services in Lahan hospital on the basis of their sources of income. 33% respondents from agriculture occupation, responded that they will be able to pay 10-60% and 5% will pay 60-100% of total what they have paid during their last episode of illness in private health facility. 5% respondents were business people, reported that they will be able to pay 10-60% and same number of 5% will be able to pay 60-100%. 1% respondents were government employees responded to be able to pay 10-60% and other 1% will pay 60-100% expenses. 3% respondents were private employees, responded to be able to pay 10-30%. Respondents, 9% from labourer class, reported their ability to pay 10-30% of total what they paid during their last episode of illness in private health facility.

Two members of depressed and vulnerable groups reported that “ we trust on the government facilities and prefer to go to public hospital for their treatment. If we don’t get better, we go to private providers and pay higher cost of treatment. We will pay the equal amount of money as fees to government hospital if we get good quality of services in the public hospital.”

One of member of HHC reported that “ people will pay higher fees for services if these doctors treat them properly and give them medicine which are available in hospitals. Doctors don’t want to give good consultation because they want to run their private clinics.”¹⁰

Fig. 12: Sources of Income and Ability to Pay in Lahan Hospital

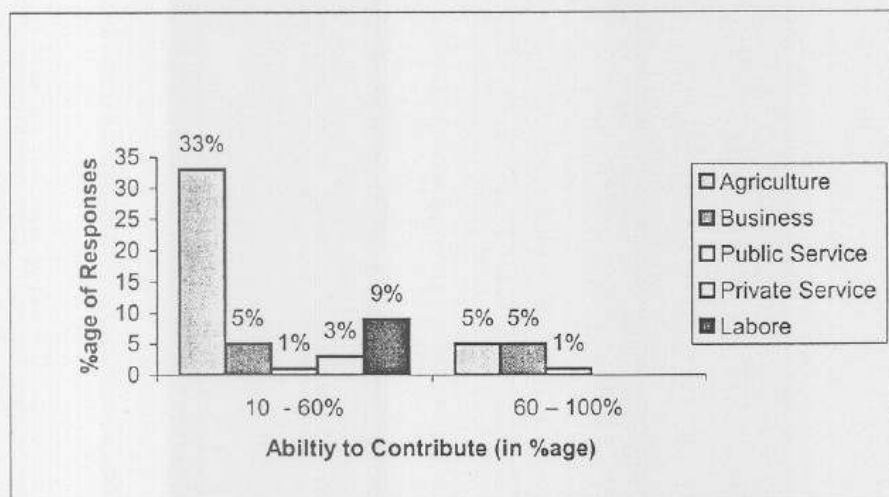


Table 1.10 shows in Siraha hospital that 52% of respondents paid almost NRs. 10 for the travelling expenses to reach the hospital. In Lahan hospital 63% paid NRs. 10 for travelling to reach hospital. It is the double of the registration fee which they paid in the hospital. It aggregate the potential cost for seeking health care in public hospitals.

Travelling Fare (NRs.)	Siraha Hospital		Travelling Fare	Lahan Hospital	
	Freq	%age		Freq	%age
1-10	31	52%	1-10	31	63%
11-20	13	2%	10-20	13	27%
20-40	3	6%	20-40	3	6%
40-60	1	2%	40-60	1	2%
60-80	1	2%	60-80	1	2%
Total	49	100.0%	Total	49	100.0%

Table 1.10 Travelling Fare to Reach Hospital

¹⁰ Member of Hospital Helping Committee, Lahan.

Table 11 shows that 58% of the companions lost their working income ranging from NRs.50-100 and in Lahan 37% of the companions lost their working income for NRs. 50-100 due to accompanying the patient. The loss of companion income is also aggregate the treatment cost of respondent.

	Siraha Hospital		Lahan Hospital		
Loss of Companion	Freq	Percent	Loss of Companion	Freq	Percent
0	1	3,4%	0	4	14%
10-50	9	31,0%	10-50	5	17%
50-100	17	58,6%	50-100	10	37%
100-150	2	6,9%	100-150	9	32.9%
Total	29	100,0%	Total	27	100%

Table 11 Loss of Companion's Working Income in Siraha and Lahan Hospitals

Table 1.13 shows, 60.4% of respondents in Siraha hospital, reported that they visited government health facility and almost 40% in private for treatment during their last sickness episode. In Lahan hospital, 56% respondents reported their visit to public health facility and 44% reported private health facility for the treatment of their last illness. This trend shows that the respondents trust on the government and they prefer to visit public health facilities for the treatment.

Type of Facility	Siraha Hospital		Type of Facility	Lahan Hospital	
Government	29	60,4%	Government	23	56,%
Private	19	39,6%	Private	18	44%
Total	48	100.0%	Total	41	100.0%

Table 12: Visit of Health Facility During Last Episode of Sickness

5.4 FINDINGS ON EXPECTED SOURCES OF REVENUES IN THE HOSPITALS

Health provider, key informants and community leaders reported different sources for generating revenues in Siraha and Lahan Hospitals. Chairman DDC responded that like Lahan eye hospital, we are planning to establish paying clinics in hospitals.

5.4.1 Paying Clinic

Medical Officers and para medical staff of the hospitals were asked their suggestions to establish paying clinics in these hospital. Medical providers and staff reported that they will be agreed to start paying clinics in Siraha and Lahan hospitals in the afternoon. They reported, they will charge 50% fee in the hospital to provide health services at affordable prices. One of the key informant responded that government is already running paying clinics in Kathmandu and why not in Siraha? But there should be an agreement made between the government and providers for sharing the business on percentage basis.

On asking about the percentage sharing of fee with government, respondents reported they will prefer to run paying clinics on 60%-40% basis. The laboratory and x-ray staff reported that they will also work on the sharing basis and will work for 3-4 hours daily.

Key informant and community leaders reported that they will encourage this practice and motivate the community to get benefit from the services. Because, it will improve the health status in the district and utilization of health services by the community.

5.4.2 Drug Revolving Funds

It was asked to key informants of DHDB for starting drug revolving funds in the communities. Key informant responded that they are agreed to start community based drug schemes in Siraha and Lahan municipalities. But it needs long efforts to motivate the communities to participate in these schemes. These schemes will be provided security from the district health development board and initial investment will be possible through government. Community members will be trained to regulate and supervise the funds. One community leader reported that we have asked to all Village Development Committee's chairmen to come with proposal and group of 10 to 40, we will give them initial capital to start the scheme.

5.4.3 Stall Rentals

It was discussed with the key informants what is their experience with stall rentals, they reported that they are satisfied with the existing revenue, collected through renting out the

stalls and they will construct more shops in Siraha hospital as it is a permanent source of income to improve the sustainability of the services.

5.4.4 Ambulance Services

During the interviews, medical providers were asked about the other sources of income in the hospitals. The reported that Siraha district's population is 525,000 but we have only 2 ambulances in the government hospitals. We are generating substantial revenues through two ambulances but we need two additional ambulances for providing emergency services and earning revenues. Two member of the hospital helping committees reported that community always ask for ambulance services because it is cheaper than private services.¹¹

5.4.5 Fair Price Drug Shop

Author asked the members of DHDB in their meeting about fair price drug shops in the hospitals. The members responded that they are also thinking on these lines because it will increase the cost recovery and will provide additional inputs to improve the quality of health services. In the medical providers and key informants responded that they will further discuss this issue in the next meeting of DDC to get their feedback.

5.4.6 Increasing Fee for Inpatient services.

Health providers responded that another source of revenue is to increase the fee for inpatient services because it is not significant and people are paying higher fees in private hospitals. But the key informant were disagreed with the idea, they said that it will discourage the poor patient to get services from hospital who would not have sources to pay fees.

5.4.7 Increasing the Administrative fees

Medical providers reported that the current charges for administrative works like certification of police case and reporting of medical cases is low, it can be increased upto certain level. It will help to improve the cost recovery of the hospital.

¹¹ Members of HHC, Siraha and Lahan Hospitals

5.4.8 Community Based Health Insurance

This issue was discussed among key informants, they responded that they will encourage such schemes as because these would help to provide better health services to the communities at affordable prices and community will be committed to pay for the services.

5.5 SUMMARY OF FINDINGS

5.5.1 General Information

The exit interviews were conducted with 100 patients, 50 in Siraha and 50 in Lahan hospital. In Siraha hospital 01 persons left the interview without responding half of the questions. In Siraha, average family size was 6.5 and in Lahan it was 7.1. Female respondents were 50% in Siraha and 63% in Lahan. Majority of the respondent almost 50-60% were in the productive age group (10-30 years), visited the hospitals. The literacy rate of the respondents in Siraha hospital was total 37% and in Lahan it was 42% (primary to campus level). 96% respondents in both hospitals were Hindu and only 4% were Muslims. In the district, agriculture was the main source of income, in Siraha 51% and in Lahan 61% were attached with farming and cattle raising.

5.5.2 Loss of Working Day

In Siraha hospital 22% respondents reported average loss of 30-60 days (mean loss 45 days) and in Lahan 37% were found with average loss of 30-60 working days. Only 1% were found with average loss of more than 100 days in both hospitals.

5.5.3 Range of Monthly Income

In Siraha, 74% and in Lahan 37% respondents were earning their monthly income for NRs. 1000-3000. The range of monthly income of NRs. 3000-5000 was found double in Lahan hospital than Siraha hospital. Similarly, income range for NRs. 8000-12000 was found 2.5 times higher in Lahan hospital than Siraha hospital.

5.5.4 Loss of Working Income

Due to illness, 28% of respondents in Siraha and 35% in Lahan, lost their working income for 40-100 days. 8% in Siraha and 15% respondents in Lahan hospital, were reported to

loos their income for 101-200 working days.

5.5.5 Expenditure for Seeking Treatment

The total expenditure for seeking treatment during the last sickness episode, found relatively equal to their monthly income in Siraha hospital. In Lahan, 24% respondents with monthly income for NRs 8000-10000 spent only 9% for seeking health care ranging to NRs. 6000-1000.

5.5.6 Quality of Services

In both hospitals, overall quality of services was found not good and patients were not satisfied with the services. Non availability of medicine, laboratory test, long waiting time and treatment not according to the expectation were found major factor of poor quality and respondents un-satisfaction. Respondents were satisfied with health personnel because medical officer were available in the hospital during the OPD time but respondents were not happy with their treatment.

5.5.7 Preference of Exchange

As sources of finance to health services, majority of responses were in favour to exchange their jewellery, farms and stock of foods. 20% responded that they will prefer to get loan to pay for health care needs and they will have to pay 60% interest on yearly basis.

5.5.8 Source of Income and Ability to Pay

Data collected from the exit poll interviews, it was found that users are willing and able to pay health services. Respondents who depend on agriculture as a source of major income, reported that they will be willing and able to pay more than other occupations for health services under the conditions that they will get medicines, good treatment and laboratory services from the hospital.

5.5.9 Travelling Fare to Reach Hospital

In Siraha, 6% of the respondents reported their average travelling expenses to reach hospital, was NRs. 20-40 and in Lahan hospital, 27% of interviewees reported they spent NRs. 10-20 to reach hospital. Only 2% of the respondents reported that they spent NRs. 40-

80 to reach hospital. Users of these hospitals mostly come from nearest wards and VDC, a very limited patients reported from long distance.

5.5.10 Loss of companion Income

It was found that apart from the respondents income, companion also get loss of his/her working income during the visit to hospital. Because most of the users were children and women and male member as a family head has to accompany the patient.

5.5.11 Travelling Time to Reach Hospital

Respondents in Siraha and Lahan hospital reported the average travelling time 30 minutes to reach the hospitals. Due to good road and availability of transport, people spend less time for travelling, however it has some value which will contribute to opportunity cost of the treatment.

5.5.12 Use of Health Facilities

It was found through the respondents that users prefer to visit government health facilities because they believe that doctors will provide good services.

6. DISCUSSION

The descriptive, quantitative study was conducted in Siraha and Lahan hospitals in Siraha district, Nepal. The main focus of the study was to assess the users' perceptions on the quality of health services and their ability to pay fees if the quality of services improves. Most studies in industrialized countries and very few of quantitative nature on users' willingness and ability to pay for health services conducted in developing countries (Kojouhar Austin H et al. 1993, Gribben B 1993, Gilson L et. 1994).

In this study, quality of services was perceived as low among the respondents at exit poll and focus groups discussion in the community. At exit poll, it might be possible, when patients are briefed about the purpose of the study before interview, they will respond only to the negative issues and ignore the positive aspects. It may lead the study results in different direction.

With respect to the satisfaction with health provider, main influencing factors were no proper consultation, short time of examination and medical skills of the provider. Other visible factors were non-availability of medicine, laboratory test and treatment not according to the expectation. Observed factors related to hospitals, were lack of cleanliness, lack of physical facilities, lack of medical equipment/instrument and nonavailability of specialised services. Factors that contributed to the organization of services, were long waiting time to see doctor, and improper provision of emergency services.

Respondents were able and willing to pay fees for services in public hospital as they were already paying 20 times higher fees to the private provider for good quality of services. Factors influencing to pay higher fees in private clinics were short waiting time, good consultation, free follow up visits, proper treatment and availability of the providers.

6.1 DETERMINANTS OF QUALITY OF SERVICES ACCORDING TO THE RESPONDENT (USER)

6.1.1 Socio Demographic Characteristics

Demographic data reveals that majority of the patients were in age group of 30-60 years in Siraha hospital. Utilization rate was higher with married women in the productive age group. Agriculture was found main source of income with the respondent, this source of income is more depend on seasonal variations. More than 50% of the respondents were illiterate. They recognize the quality through the availability of the medicine and use of instruments during examination. It reflects the results of a study by Chet Nath in Nepal, that when there was not sufficient medicines in the health facilities, patient move to hospital and complained that the quality of services is not good.

37%.2 of the respondents in Siraha hospital have their monthly income was NRs. 1100-2000 and 25.8% were having their monthly income for NRs. 2100-3000, it shows that people from lower income group use the public health facilities and how much they can spend for their health. They prefer to visit the public hospital even they have to wait for long time to see the doctor. For this purpose, they often lost their working income and also pay traveling expenses to reach the hospital.

As the largest Hindu state, More than 95% of the respondents were Hindu, Ethnicity play an important role in health seeking behavior. It is believed in the Hindu religion that after getting illness, one has to seek treatment to become 'cleansing'¹². 61% of the respondents were peasant, the people of this occupation are more dependent on the one source of income to produce food. Women and men have been working for growing and producing food items and if one of them get illness, it create a gap in their daily life and income may goes down as the disease occurs, therefore the diseases are more common in this group of people. It reflects the utilization trend by occupation. Second, higher range of users were laborer, if they get sickness they tend to visit the hospital immediately because if they don't get well, they will not be able to provide sufficient food to their families.

¹² Cleansing – mean cleaning of the body and soul.

Higher utilization of user in both hospital were in productive age group of 10-30 years were reported will illness, this trend of getting sickness in early age group reflects the higher percentage of morbidity in adults which leads to low life expectancy in the district. Similarly, the relatively a lower %age of users was in age group 30-60 year.

Respondents in Siraha and Lahan reported there is no loss of working income. As the more respondents were from agriculture occupation, it was difficult for them to give monetary value to their working days. Even the illness was for a long time. If they will be asked to go through their daily expenses and count them, it may help them to measure their income by looking into their expenses. Loss of income was ranging from 1-100 days depending on the sickness and its length of treatment.

6.1.2 Ability to Pay for Health Services.

The data collected from the sources, it was found that the respondents have the ability to pay for services. Amount of money spent during the last episode of sickness reveals that people will be able to pay higher fees but they need services in return. What services they need, responses received from the focus groups discussion reveal that they expect good treatment, friendly attitude of the provide, availability of medicine and availability of diagnostic services. People were visiting to private providers and paying higher fees for services.

Ability to pay for health was found dependent on the sex, and economic contribution of the household member. Household women, earning member of the family and sons were considered most important and ability to pay for their treatment was higher than in old age member and girls.

Literacy of the respondents in the present study was found an influencing factor to perceive the quality of services. Respondents who had education and working with private institutions were found highly dissatisfied with quality than illiterate patients. It is true that people who are more illiterate probably don't know about the illness and quality of care

except the availability of medicines and attitude of health personnel.

6.1.2.1 User's Expectations

Most users were found dissatisfied with the quality of services due to the non-availability of medicine, improper examination and lack of specialized services. As expectations play an important role for the satisfaction found by Williams B, 1994 where substantial connection exists between the satisfaction and fulfillment of expectation. There were some unrealistic expectations of the respondents like, doctors should be available 24 hours in OPD, medicines should be free for everyone. This might be due to the over expectation with the government facilities according to the users own wishes.

6.1.2.2 Medical Staff

The provision of health services depends on the availability of medical staff in the health facilities. It plays a vital role for the continuity of health services for the communities. Specially, in secondary care units like referral hospital in a district must have adequate human resources to ensure the health services for the community. In Siraha and Lahan hospitals, the actual available staff was 50% less than the allocated positions in the districts. This factor would naturally have a big impact on the gravity of service delivery. In many developing countries with resource constraints, the same situation can be found. Due to lack of resources, it seems difficult to provide appropriate health services with the limited staff.

6.1.2.3 Doctor Patient Ratio

Due to the lack of medical officers, only two doctors were supposed to run a district hospital. Only one doctor has to see more than 70 patient within two hours and other doctor looks after the administrative and management of hospital and primary health care centers and health posts. However, it is learnt that in industrialized countries, a doctor gives 30 minutes to a patient, which motivate the patient to pay for services.

6.1.2.4 Private Practice

Due to lack of financial resources, doctors are underpaid, therefore they tend to concentrate on private practice where they earn more than government salary. They give good quality of services and get more income. This practice encouraged the provider to give more time

to private practice.

In Siraha and Lahan hospitals the same situation exists, medical doctors were running their private clinics inside and near to the government hospital where they refer their patients from the hospital. This trend is more common from top to bottom; even the in charges of health post, and Sub health posts are used to pass their official time in private practice. During the discussion with providers, it was found that the same situation exists also in other districts also and there is no policy from the government to deal with this issue.

Researcher can also recall the similar situation from his own country (Pakistan) that private practice is more common in all the districts and government has no policy to stop the private practice because their role in the delivery of health services is also very significant.

6.1.3 Administration and Management of Services

In Siraha Hospital, one doctor, is working on more than five positions; as Medical Superintendent, District Health Officer, Public Health Officer, Member Secretary DHDB, Member Secretary HHC and as well as a private provider. The administration and management of district hospitals needs the managerial capacity to run the district hospitals according to the set standards. Similarly, the primary health care project needs full time staff to run the services appropriately and efficiently.

6.1.3.1 Lack of Nursing Staff

Likewise doctors, nursing staff is not sufficient in both hospitals. Two nurses were working in each hospital. Government has not yet provided the nurses according to the bed capacity of these hospitals. Therefore the health services could not be rendered to the community. Assistant nursing staff which were appointed by the hospital helping committee, they were not able to assist the nursing staff due to lack of technical knowledge.

6.1.3.2 Transfer of Staff

Political transfer of the staff was more common and trained nurses do not want to work in the rural areas. Because there are less opportunities to earn more money as compared to urban cities and private hospitals. In Siraha, Assistant Nursing Midwives were transferred

from sub health post to hospital. Eventually, there was no female staff in health post and sub health post and patients have to suffer. Due to this reason, patients by pass the first level of health facility and move towards hospital.

Posting to remote areas like Siraha and Lahan are considered as 'punishment postings'. Therefore staff including nurses and x-ray technicians go on long leave even if they are posted there, they try to get transfers to big cities and towns where they get more incentives. The untimely and political transfers create problems in the service provision. It shows that either the policies are not transparent or nor practised. It is very important that government should concentrate on the needs of the underserved communities and must ensure the provision of adequate staff in hospitals in rural areas. The availability of support services like transport, housing and education etc, may be an incentive to motivate the health staff to live in far flung areas and serve the community.

For the appropriate diagnostic services, technical manpower is very important to run the x-ray and instruments which needs training and precision. An unqualified and untrained dark room assistant is handling the x-ray machine, it will lead to improper diagnosis and treatment. And improper treatment will lead to the patient dissatisfaction with the service. It will increase the underutilization of resources and cost of medical care.

Communication gap among providers was found to be another important reason of poor quality of services in the hospitals. The patients are referred to other districts even the services of professional and qualified staff is available at the nearest health facility. It increases the gap among the communities and resources are not properly used.

6.1.3.3 Medical Supplies

The supply of medicine were inadequate and patients have to purchase the medicine from outside the hospitals. The user revenues were used to purchase the medicines from open market. Government did not increase the budget of hospital according to the beds capacity. This situation is also happening in sub health post and health post and patient are visiting hospital with this complaints. Sometimes, the budget for medical supplies for health post is used on hospital which increase the problems in health post and sub health posts.

Such unequal distribution of drugs and medical supplies are found in other developing countries like Pakistan. It is not only the lack of resources that lead to such a situation but a lack of political will also. The doctors in the hospital are 'powerful' to keep the medicines, meant for health posts and sub health posts.

6.1.3.4 Lack of Medical Equipment

Non-functioning medical equipments and furniture fixture hindered the provision of medical care. In emergency cases patients have to move other district hospital which increase the cost of medical care and patient loose confidence in the medical system. This is also considered one of the important reason to visit private providers and paying high fees. This lack of motivation is complicated by the fact that it is costly to maintain and repair the non functioning equipments. Therefore the government which is already having less resources, is not in a position to repair nor to replace.

It was repeatedly found that doctors make the instruments faulty so that the patient could move to private facilities. This practice is common in other areas of the country. International donor agencies are establishing the health maintenance system but it would be needed, the cooperation from provider side.

6.1.3.5 Users 'Made to Prefer' Government Doctor in Private Setting

Patients in both municipalities were made to prefer private doctors in the afternoon because they were asked by the doctors to visit private clinics, where they will be checked properly. In hospital, doctor gives only 1 minute to a patient and in private clinic more than ten (10) minutes. It has also been found in studies that quality of health services provides a greater freedom of choice to user among providers and higher cost of medical care (Asenso-Okyere, 1998).

6.1.3.6 Fee at Private Clinic

Members of the group informed that they pay twenty times higher cost to the private clinic for the good consultation and treatment. The providers are the same in private clinic but the main difference is quality of services which is not available in hospitals. This trend of consumption of health services, shows that if we provide good quality services in the

hospitals, users will be able to pay almost the same fee in government facilities what they in private clinics.

6.1.3.7 Trust on Government Facilities

It was found that users trust on the government facilities and prefer to visit public hospital at first for their treatment but due to non availability of appropriate services, technical manpower and medicines, they go private providers and pay higher cost of treatment.

There is no cash box with the cashier to keep the money. Registration clerk is used to put money/rupees in his hand's fingers. He put this money in his home and give the cashier after one or two months and there is no security system.

In the health services, treatment depends on the proper diagnosis of the disease. In Siraha hospital 40% of the users did not get laboratory tests inside the hospital and they have to go for outside the hospital where they pay more than double amount for the diagnosis. Same situation lies with x-ray services because the providers don't accept the x-ray result of the hospital staff and advise the patients for private x-ray services.

7. CONCLUSION AND RECOMMENDATION

7.1 CONCLUSIONS

1. The users of Siraha and Lahan hospital are spending comparatively high amounts of money formally or informally for the purchase of drugs and diagnostic tests outside the hospitals.
2. Lahan hospital has more potentials to improve cost recovery as it is more accessible to the communities and offer better health services in the district.
3. It was concluded that respondents were very much satisfied with the health personnel but they could not get the treatment as the expectation and therefore they visit to private providers.
4. It was concluded that people are willing and able to exchange their jewellery and farms for seeking health care.
5. Overall quality of health services in both hospitals was found poor.
6. Utilization was found high in women because they trust on the government hospitals.
7. The ability and willingness to pay for health care was higher in farmers because they give importance to get well. Being the earning members, they prefer to exchange their precious items like jewellery, farms and stock of food.
8. The ability and willingness to pay was found higher for the treatment of son and wife/mother. They are given importance due to their position in the family.
9. Utilization rate was higher between age group of 10-30 years.
10. There were contributing factors related to quality of services in hospitals like non availability of medicine, laboratory test, long waiting time, short examination time and treatment not according to the users expectation.
11. Funds were not timely released by the ministry of health and it delayed the programs which were planned by the district health team.
12. Factors related to the providers were no proper consultation, involvement in private practice, lack of technical skills, non punctuality and non availability of the allocated medical staff in the hospitals.
13. User funds should be managed properly as they are the public revenue but it has not

been used on and should be used for

14. The following variables

15. Role of DHO and HMC must be clarified and practiced to reduce the communication gap between community and providers.

16. Lahan hospital has more opportunities to be upgraded as highway hospital, DHS should look into this opportunity and local resources should be mobilised to strengthen the cost recovery system.

7.2 RECOMMENDATION

Following recommendation are being suggested on the basis of findings of this research in Siraha and Lahan hospital.

MoH, Nepal should ensure the availability of doctors, nurses and x-ray technicians according to the allocated positions.

MoH Nepal should ensure the provision of medical supplies and laboratory equipments and their effective utilization to improve the quality of services.

Communication gap among providers, members of hospital helping committee and community should be reduced to enhance the quality of services and effective utilization of resources. For this purpose, role and responsibilities should make clear to HHC and providers.

To get the users feed back on services, comments box may be placed in the hospital and joint meetings can be arranged with the communities.

MoH should renovate the hospital building on priority basis as this issue needs urgent attention.

MoH should implement the service rules and regulation to bound the staff available during the official duty hours in the hospital.

Emergency services should be improved by making compulsory availability of doctors during emergencies.

Sitting arrangement should be made for the OPD patients and emergency patients should be treated in proper manner.

Financial management system should be strengthened in the district hospital and user funds must be closely monitored by the professional staff. The books of accounts must be audited

on yearly basis and reports should be presented to the hospital management committees.

Hospital management committees should be given authority to check and regulate the user funds and its proper utilization for the improvement of quality of services.

Medical equipment and instrument which are available should be placed and used in the hospitals.

MoH should make appropriate policies for the private practice within the hospitals.

MoH should look into the needs of Paying Clinic or Special clinics in the afternoon with the same medical staff by sharing incentives.

Funds for development works specially from the donor agencies should be timely released according to the budgetary needs of the hospitals.

The newly constructed maternity wards and training center should be handed over to the management committee for the benefit of local community.

Consumer oriented services should be encouraged

MoH should provide medical and para-medical staff according to the allocated positions for the hospitals.

Fair price drug shops should be established inside the hospitals to earn revenue and provide quality of medicine to patients.

Proper repair and maintenance of hospital building must be ensured to maintain the quality of health services.

Recommendations regarding Research

1. On the basis of finding of this exploratory study, a study should be conducted to identify the user ability and willingness to pay in private providers.
2. It is recommended to initiate another research work to assess the perception of non users of hospitals on the quality of services and their ability to pay.
3. It is recommended by the researcher to initiate a study to determine the gender related factors associated with the willingness and ability to pay in Siraha district.

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ANNEX. 4 FIELD WORK PLAN

The duration of research period was from 2nd May to June 18, 2000. Following schedule of activities was adopted after the discussion with host tutor in PHC, Project, Nepal.

First Week May 02-08	Meeting with the Team Leader (GTZ) Discussion with Host tutor. Meeting with concerned health officials, DG Health Services, Secretary Nepal Research Council, Foreign Aid & Planning Division, MoH.
Second Week May 09-15	Arrival at Study Area-Siraha Meeting with GTZ, officials Introduction with Medical Staff of Siraha and Lahan Hospitals Selection and Training of Interviewers Pre-test of questionnaire Retraining of Interviewers
Third Week May 15-22	Interviews with the patients at exit poll in Siraha Hospitals Interviews of Key Informants in Siraha Municipality Meeting with Hospital Helping Committee and District Health Development Board, Siraha
Fourth Week May 22-29	Data collection and validation Focus Group Discussion in depressed community "Tatma" Participant's Observation in Siraha Hospital Interviews with the patients at exit poll in Lahan Hospitals Interviews of Key Informants in Lahan Municipality Interviews with Medical Providers in Lahan
Fifth Week May 29-June 05	Interviews of Key Informants in Lahan Municipality Secondary data collection from Lahan Municipality Interviews with Medical Providers in Siraha Focus Group Discussion in Muslim Community "Ramole." Focus Group Discussion in vulnerable community
Sixth Week June 06-13	Feedback to the community and providers in Siraha Hospital Data entry and analysis in EPI6 Preparation of draft report Presentation of preliminary results to GTZ and health authorities.
Seventh Week June 19-26	Visit of B.P. Koirala Institute of Health Sciences Visit of Regional Health Services, Dhankuta Site Seein in Khatmandu Arrival in Heidelberg.

**ANNEX 5 STRUCTURED QUESTIONNAIRE (EXIT POLL) IN ENGLISH AND MAITHLI
LANGUAGE**

Interview of User (Patient at Exit Poll)

Name of Hospital NAMHOSP <__>

Questionnair QNO <idnum>

Interviewer INTV <__>

Date of Interview Date <dd/mm/yy>

1. Name of VDC: VDC <_____>

2. Ward No: WARD ###

3. Age (Years): AGE ##

4. Religion: REL #

5. Caste: CASTE <_____>

6. Sex: SEX #

7. Marital Status: CSTAT #

8. Educational Status: EDUC #

9. Occupation: OCC <_____>

10. No. of persons in your family HHSZ ##

11. By which means of transport,
did you reach this hospital TRANSTO <A>

12. How much time did you spend for reaching the hospital
(from home to hospital and back) TRAVT ##.##

13. How much did you pay to reach the hospital FARE ###.##

14. From which disease/illness,
you are suffering from? DSE <_____>

15. For how many days you are suffering from this disease
DSEDUR ###.##

16. For how many days, you could not work due to this disease LOSTDY
###.##

17. If you don't work for one day due to this illness,
how much income did you lose? LOSINC ####.##

18. Do you have any companion with you COMP <Y>

19. If yes, how many person/s are with you now? COMPNO ##

20. How much is the loss of income of each companion
 LOSCOMPa #####.##
 LOSCOMPb #####.##
 LOSCOMPc #####.##
21. Did you visit any other health facility before coming
 to this hospital OTHCONS <Y>
22. If Yes, which health facility NAMHFAC <_____>
23. What was the type of facility TYPE <A>
24. When you visited the health facility,
 how much money did you pay in following accounts
- | | | |
|--------------------------------|----------|----------|
| a. Transportation (returned) | TRNSCOST | #####.## |
| b. Consultation | CONSCOST | #####.## |
| c. Medicine | MEDCOST | #####.## |
| d. Diagnostic services (x-ray) | XRCOST | #####.## |
| e. Lab tests | LABCOST | #####.## |
| f. Total: | TOTCOST | #####.## |
25. Why did you come to this hospital for your treatment ?
 REACHO <A> <A> <A> <A>
- | | |
|-------------------------------------|-------------------------------|
| (a) Referred | (b) Doctor is Good |
| (c) Nearest Health facility | (d) All services available |
| (e) Better HS are available | (f) Medicine available |
| (g) X-ray & Lab. services available | (h) Health workers are polite |
| (i) Fees low | (j) Exemption available |
| (k) Short waiting time | (l) Other (specify) |
26. Did you pay the fee in this hospital Yes No PAYFEE <Y>
 If yes, How much for
 Total: #####.##
27. If No, Why. (Ask for details and write below)
 REANOF <_____>
28. Did you get any exemption for paying fees FEEXEMPT <Y>
 (If no, go to Next question)
 If Yes, How much for
 Total: EXTOT #####.##
29. Did the cashier issue you OPD Ticket ISSTICK <Y>
-
30. How did you get the money to pay for your health services
 MONSRCE <A> <A>
- | | | |
|-------------------------------|------------------------------------|-----|
| a. Household savings | (b. Self saving | () |
| c. Salary | (d. Loan from relative (Payable) | () |
| e. Loan from friend (Payable) | (f. Loan from family member | () |
| g. Sale of animal | (h. Sale of agricultural products | () |
| i. Others (specify) | (| () |
31. Did you know the fee schedule before visiting this hospital
 Yes () No () FEESCHE <Y>
32. Who examined you ? EXAMINER <A>

- a. Doctor () b. Nurse () c. AHW ()
d. Others (specify) () e. Don't know ()
4. How long did you wait for the health personnel. WTIME #.##
5. Are you satisfied with waiting time Yes () No () SATWTIME <Y>
6. Is the waiting time PERCWT <A>
Short () b. Long () c. Very long () d. No comment ()
7. Are you satisfied with the health personnel who handled you
Yes () No () SATHP <Y>
8. How was the attitude of health personnel ATTHP <A>
a. Friendly () b. Hard () c. No comment ()
9. Did doctor advise you for medicine Yes () No () MDMED <Y>
10. Did you get the medicines from hospital Yes () No () HOSPMED <Y>
If no, Why, NOMEDH <A>
a. Medicine not available () b. Are these very expensive ()
c. You don't have the money () d. Others (specify) ()
11. Did the doctor advise you for laboratory tests
Yes () No () ADVLAB <Y>
12. Did you get the test from Hospital Yes () No () LABHOSP <Y>
If No. Why REANLABH <_____>
13. Is the fee PERCFEE <A>
a. Very Low () b. Low () c. Moderate ()
d. High () e. Very high () f. No comments ()
14. If patient says very low, low, moderate then ask would you pay
Rs. 25 Yes () No () b. Rs. 20 Yes () No () c. Rs. 15 () No ()
25RS <Y>
20RS <Y>
15RS <Y>
15. What can you say about the quality of health services. QLTSERV <A>
a. Poor () b. Good () c. Very Good () d. No comments ()
16. Did you receive the treatment according
to your expectation TRTEXP <Y>
a. Yes () b. No () d. No comments ()
17. What types of health services, do you expect from this
hospital EXPHOSP <A> <A> <A>
a. Availability of Doctor ()
b. Friendly attitude of health personnel ()
c. Availability of X-ray services ()
d. Availability of laboratory services ()
e. Availability of essential drugs ()
f. Short waiting time ()
18. What health problems did your family had during
the last one year FAMPROB <Y>
a. If says No. go to question number 49)
b. If Yes, What is the relation
FAMPROBY _____

47. Where did you get the treatment FAMPTR <A>
 a. Public () b. Private () c. Traditional healer ()
 d. Local Pharmacy () e. Ayurvedic () f. Others ()
 48. How much did you spend for the treatment
 TOTFAMP #####.##

49. If we provide you good consultancy, necessary medicine,
 x-ray facilities and laboratory services in this hospital,
 what fees would you be able to pay in following accounts
 PAYTOT ###%

50. What is the main source of income of your household
 a. Agriculture... Yes () No () HHINCagr <Y>
 b. Cattle rearing. Yes () No () HHINCcow <Y>
 c. Public Service. Yes () No () HHINCpub <Y>
 d. Private Service Yes () No () HHINCprv <Y>
 e. Business..... Yes () No () HHINCbus <Y>
 f. Labor HHINClab <Y>

51. How much do you earn monthly / Yearly NRs.. INCmo #####.##
 INCyr #####.##

52. Do you have other sources of income,
 apart from main source, Yes () No () OTHSRCE <Y>

If Yes, what is the source DET52 < _____ >
 How much you earn monthly/yearly. 52mo #####.##
 52yr #####.##

53. In case of health emergencies, do you have some precious
 items which you can sell Yes () No () NONMOHE <Y>

If yes, What are these DET53 <A> <A> <A>

a. Cattle COWHE
 b. Farm FARMHE
 c. Stock of food FOODHE
 d. Savings SAVHE
 e. jewelry JWLHE
 f. Cash CASHHE
 g. Other (specify)
 h. Total:- TOTDET53 #####.##

54. In case of emergency, which source of income
 you would prefer to exchange EXCHE <A> <A>

a. Cattle XCcow #####.##
 b. Farm XCfarm #####.##
 c. Stock of food XCfood #####.##
 d. Saving
 e. Jewellery XCjew #####.##
 f. Cash
 g. Others
 h. Total Xctot #####.##

55. If you take loan for treatment, will you return
 Yes () No () RETLN <Y>
 RETPD <A>

- a. 1-Month
- b. 3-Month
- c. 6-Month
- d. 1-Year

56. Would you pay interest Yes () No () PAYINT <Y>