COMMUNITY SATISFACTION, CURRENT TRENDS AND FUTURE PROSPECTS OF BASIC HEALTH UNITS IN PAKISTAN: AN ANALYSIS

Muhammad Ibrar[*]
Raazia Hassan Naqvi[**]

Abstract

Health is the topmost priority in every individual's life. Good health accelerates human efficiency and the development procedure, and as a fundamental human right it should be accessible and reachable to all. According to World Health Organization's definition, "Health of an individual or community is not only concerned with physical or mental state but also an individual's economic and social wellbeing." The research in hand focused on the Primary Health Care Services provided by the Basic Health Units in Mardan District of Khyber Pakhtunkhwa Province, Pakistan. The objectives of the study were to assess the health care services provided by the BHUs and to find out the hurdles in the way of service delivery for the management of the BHUs. The universe of the study was District Mardan of Khyber Pakhtunkhwa Province of Pakistan. The sample of the study was selected by multi-stage cluster sampling techniques. The findings highlighted that most of the young people especially women goes to these BHUs for mostly cough and flu or gynecological problems, while mostly men of the area prefer to go to private clinics. The older women cannot go to the BHUs because they have difficulty in reaching these BHUs which are located far away from their houses and the transport is not available for them in the area. Most of the beneficiaries of the BHUs complained of low quality medicine, no waiting area for the patients and attendants, and lack of LHVs or LHWs home visits in the periphery.

Key words
Community, Basic Health, Public Health, Disease, Khyber Pakhtunkhwa

Introduction and Literature Review

Health is a common word which is used in everyday discussion by all individuals without actually knowing what it really means. The

[*] Assistant Professor, Department of Social Work, University of Peshawar, KP, Pakistan.
[**] Lecturer, Department of Social Work, University of the Punjab, Lahore, Pakistan.

term health and health care are mostly used interchangeably by individuals however both have different implications. According to World Health Organization (WHO) health is a state of mental, physical, and social well-being and not only the absence of any disease or frailty, which shows that defies the organic functionality based definitions of health discussed above. As according to World Health Organization's definition it makes it clear that the health of an individual or community is not only concerned with physical or mental state but also an individual's economic and social wellbeing.[1]

Health care is a term which is mainly meant for being concerned for other human beings. The health care can be defined as a large number of services delivered or provided to fellow individuals, families or communities by the representatives of the health care service or professionals, to promote, maintain, monitor and to restore health. These health care services might be financed in any way but they are primarily concerned with serving people either in the form of diagnosis, help, cure, education and rehabilitation by health practitioners. In most of the countries of the world health care is basically a governmental or state function.[2]

International Development of Public Health Care

The four different phases in the history of health which are as follows: *Disease control phase (1880-1920)*: During 19th century the emphasis of health was on sanitation e.g. making the physical environment of an individual clean by caring for sewage disposal and water supply. Thus this strategy helped in diseases and death control in a community.[3] *Health promotional phase (1920-1960)*: The 20th century saw the emergence of a new concept in health and that was of health promotion. The responsibility of the state for the health of an individual was realized thus health promotion of an individual including not only disease control but also health promotion was added to the functions of health. The services like mother and child health care services, school health services, industrial health services mental health and rehabilitation services were initiated under this umbrella. Another sector of public health nursing began to establish.[4] A new definition of health was presented by a renowned scholar Winslow in 1920 which states that public health is a science and art of preventing disease, prolonging life and promoting health and efficiency through organized community efforts. This definition truly recapitulates the viewpoint of public health which is commonly used till this age.[5] *Social Engineering Phase (1960-1980):* As the health sector paid emphasis on preventive medicines and public health practice, most of the models of disease also changed in developing countries as most of the acute diseases were taken care off. However some new chronic

diseases emerged in developed societies like diabetes, cancer, heart diseases, drug addiction and alcoholism etc which cannot be dealt with immunization, isolation and disinfections and cannot even explained by the popular germ theory of that time. So a new concept of health emerged which was risk factor as determinants of diseases.[6]

Health for All (HFA) Phase 1980-2000 AD: As the centuries stretched, the obtrusive gaps in the health sector in the developed and under developed countries came into focus. As in developed countries people enjoy all the determinants of good health like adequate income, education, nuitrition, sanitation, safe drinking water and a complete health care system while in under developed countries the ratio of people enjoying these services was low. John Bryant in his book "Health and the Developing World" presented a detailed and dismal picture of inequalities in health by saying: "Large numbers of the world's people, perhaps more than half, have no access to health care at all, and for many of the rest the care they receive does not answer the problems they have".[7] This paved the way for the emergence of realization that there is a health gap between rich and the poor societies and countries and this should be taken care of. As poor have also a right to health care, to protection from the killer diseases of childhood, to primary health care for mothers and children, to treatment for those ills that mankind has long ago learnt to control, if not to cure. Thus in 1977, the members of the WHO pledged themselves to an ambitious target to provide Health for All by the year 2000, that is "attainment of a level of health that will permit all people to lead a socially and economically productive life".[8]

During 1978, an Alma Atta International Conference was held on Primary Health Care which also endorsed Health for All (HFA) as the foremost social goal of governments and stressed the best way to achieve the goal of HFA is by making available primary health care to especially to the rural people and urban poor. It was also predicted in the same conference that by the year 2000 at least essential health care should be easily available in an affordable and acceptable means to all individuals and families by ensuring their full participation.[9] This conference emphasized all participating governments to make national policies, strategies and plans of action to initiate and protract primary health care as part of a national health system keeping in view of its own unique cultural norms and circumstances.[10] The main points of this Alma-Atta declaration were promotion of food supply and proper nutrition; spreading the education concerning prevailing health problems and the methods of prevention and control; adequate supply of safe water and basic sanitation; immunization against the major

infectious diseases; maternal and child health care, including family planning, prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs.[11]

The concepts related to primary health care (PHC) includes that every citizen regardless of social and economic status is eligible to access quality health care, the services of PHC should be designed in such a way that the community can be actively involved and can participate in the process, the health care services should primarily concerned with preventive and curative measures.[12] According to the Alma Ata Declaration of 1978, the PHC should primarily focus on the elements like educating masses about prevailing health problems and how to prevent from these problems, promotion of proper nutrition, adequate supply of safe drinking water and basic sanitation, maternal and child health care including family planning, immunization against the major infectious disease in the community, prevention, control and treatment of common local diseases and injuries, promotion of mental health and provision of important drugs.[13]

Health Situation of Pakistan after Partition in 1947

The health standards of the people of the Indo-Pakistan sub-continent in pre-partition days were low. Inadequate nutrition, low sanitary conditions, insufficient medical facilities and meager parental care, all contributed to the prevalence of ill health, epidemics and high rate of infant mortality.[14] Traditionally, health and disease were attributed to destiny. Even the educated people shared the same belief, because of lack of medical facilities. The resources of the country were scarce.[15] After the independence, Pakistan inherited this low state of public health of pre-partition India, and had to face immense difficulties to procure trained personnel as well as material and had virtually to start from a scratch.[16]

It was inconceivable to talk of improving the economic conditions without first undertaking the amelioration of the people's social conditions of life. Pakistan did not lose its heart. It mustered up courage and called the first All Pakistan Health conference in November 1947 at Lahore at which representatives from all the provinces were invited. In the conference all the problems covering the entire range of medical and health administration were discussed. Its recommendations were implemented by the Ministry of Health. Another conference was held in 1951 at Dacca. The conference came out with the six years health development plan, which envisaged the setting up of new medical college, conversion of medical schools into

colleges, establishment of hospitals, dispensaries, drug testing laboratories and a factory for manufacturing Penicillin, in addition to the improvement of T.B. hospitals.[17]

Meanwhile a two years priority social uplift program was also started in 1951. Important schemes outlined in six years plan, development program approved by second All-Pakistan conference were taken up under priority program. In August 1959, the 3rd All Pakistan Health conference was held at Karachi. In the conference a number of recommendations were made on important questions, relating to public health administration in the country.[18]

Rural Health Programs and Basic Health Units

The Rural Health Centers Programs originated in 1960s in Pakistan when the first ten pilot Rural health Centers were planned with each three sub-centers. These ten pilot Rural Health Centers were built during 1960-62. In 1962, Government sanctioned a scheme for establishment of 150 Rural health Centers in West Pakistan in a period of five years, by June 1975, 131 Rural Health Centers had been established in different provisions including 10 pilot centers.[19]

The project aim was to provide one Rural Health Center with three sub-centres to look after a population of 50,000. As per original plan the facilities in Rural Health Centers were comprehensive and included operation theater, indoor treatment facilities and laboratories, residential accommodation was provided for doctors and most of the staff at the Rural Health Centre only.[20]

The land for Rural Health Centers was donated by the community while the building for the sub centers were either donated by the community or built by the local government. There was no provision for accommodation for the staff at the sub-center. The sub-center's main work was preventive and health education. The rural health center was to be provided by two doctors, medical auxiliaries and ancillary staff while the sub-center was to be given one each auxiliary and ancillary worker.[21]

The essential feature of the strategy was to provide as far as possible the entire range of health services to rural areas on an integrated basis through the Rural health Centers. The project envisaged vertical integration, linking facilities through a tier of institutions (sub-centers, rural health centers, tehsil/taluka hospitals) to be district hospitals. Horizontal integration of all health services was also envisaged. The Rural Health Center was responsible for curative and preventive work, maternity child welfare, family planning, and sanitation and health education. The rural health center was expected to

supervise the work of sub centers. Transport was the key element of the supervision.[22]

Some of the weaknesses of the project studied in 1975 indicated that some of the sub-centers were located too far away from the main center which weakens the supervisory role of the main centers. The distance of 8-16 kilometer was planned initially between sub-centers. The buildings of the sub – centers were not properly maintained and houses for the staff at the sub-centers were not provided. Due to this a large number of positions of paramedics at sub-centers were laying vacant.[23] Space utilization at Rural Health Centers was not proper as most of the Rural health Centers were provided 7500 sq. ft. area with an average of 10 beds and 18-27 rooms. The buildings of the Rural Health Centers were over built considering their functions. Transport which was the main component for supervision and referral was absent in a number of places. Doctor's positions were lying vacant as most of the doctors either found employment abroad or in urban areas as they were in short supply. Indoor facilities were underutilized due to the absence of doctors and some of the important categories of staff members. Due to this, operation theaters and laboratories were also underutilized. Preventive work, maternity child welfare and family planning functions were not made to use rural Health centers as an instrument of integration as separate vertical programmes continued to operate in areas where Rural Health Center was functioning.[24]

In light of the above mentioned evaluation of the project for establishment of 150 Rural health Centers in Pakistan, the strategy was modified as following: i) Sub-Centers to be upgraded as Basic Health Units which were to be built by public funds and should have an average buildup area of about 1000 square feet. These Basic Health Units were to be manned by 2-3 health auxiliaries with proportionate ancillary staff for which residences were built as part of the project; ii) Instead of 3 Sub-Centers being provided in the catchment areas of a Rural Health Center, 4-5 Basic Health Units were planned to be built to improve supervision and referral; iii) The over provision of space of Rural Health Center was reduced so that facilities are not over built and space could be economically utilized while more facilities could be added in the same amount to serve a large number of people; iv) Emphasis was made to integrate various facilities with the Rural Health Centers being the focal point.

For the first set of Basic Health Units allocations were made in 1976. Concurrently with this, steps were taken in 1977 to train mid-level health workers called health technicians male and female. Their training was competency based training while the duration of training

was 18 months. As the new approach of popular with the provinces, larger allocations were made to the rural Health Program primarily by intra-sectoral adjustment up to 1991, approximately 5000 Basic health Units and Rural Health Centres had been built with an average of about 300 such facilities being added every year.[25]

Current Health Care System of Pakistan

All the public departments were working under Federal Government till June 2011 after 18th Constitutional Amendments but after that, the Federal Ministries were abolished and the health responsibilities of planning and fund allocation came under Provincial Health Departments making them more autonomous. Thus the Central Licensing Board, Drug Regulatory Board and the Drug Appellate Board still exist at the federal level whilst Quality Control Boards exists at the provincial level.[26]

The Provinces regulate and manage most of the public health delivery system at district level in Pakistan. Thus the health care is provided through a three tiered delivery system in districts. The first tier or the core of primary health care structure is comprised of Basic Health Units (BHUs), Mother and Child Health Care (MCHC) Centers and Rural Health Centers (RHCs). The second is the Tehsil Head Quarter Hospitals which provides inpatient care, ambulance services and referral facilities. Then there are District Headquarter Hospitals (DHQs) which are also maintained by Teaching hospitals. The Mother and Child Health Care (MCHC) Centers, Basic Health Units (BHUs) and Rural Health Care (RHCs) Centers are meant to provide basic health care services through community participation with the help and support of Lady Health Workers (LHWs), Lady Health Visitors (LHVs), and community midwives.[27]

Government of Pakistan embarked on primary health care service prior to the 1978 Alma Ata Declaration of Health for All by the year 2000. A total of 492 Rural Health Centers and 3496 Basic Health Units (Primary Health Care Units) were built during the Fifth and Sixth Five year Plan, out of a total of 625 RHCs and 4596 planned during 1978-83.[28]

National wide health care, for which primary health care (PHC) has been provided, ensures a systematic link between the village community and the whole health system. Depending upon the density and scatter of the population, a Basic Health Unit Services are meant for a population of 5000 to 10000 persons. Services provided at BHUs include MCH services, child care, immunization, diarrheal disease control, malaria control, child spacing, mental health and school health

services within its area.[29] Outreach services are provided primarily for MCH through training birth attendants, 510 Basic Health Units are linked to a Rural Health Centre. Each Rural Health Centre has about 25 beds, a Laboratory, X-ray, and provision for minor surgery. The RHC is linked through Tehsil/Taluka Hospital which in turn, is linked to District Headquarters Hospital, which will have all medical facilities including other existing facilities such as dispensaries and MCH Centre. The whole system of BHUs, RHCs, Tehsil Hospital and Finally District Headquarter Hospital, is designated as "Integrated Rural health Complex".[30]

All the BHUs are staffed by Medical Officer, a male and female Health Technician, and support personnel. RHC plays a pivotal role and acts as a focal point in the health system and it is also provided with a dentist, a laboratory incharge and a sanitary inspector. This type of approach is meant to remove disparity in urban and rural areas.[31]

Health Profile of Khyber Pakhtunkhwa (KP) Province

According to the Bureau of Statistics, Khyber Pakhtunkhwa, Government of Pakistan, in 2010 the population of Pakistan was 132352 while that of Khyber Pakhtunkhwa was 89316. The urban population of Pakistan was 43036 and urban population of Khyber Pakhtunkhwa was 2994. The rural population of Pakistan in 2010 was 89316 while that of Khyber Pakhtunkhwa was 14742. The male population of Pakistan in 2010 was 68874 and of Khyber Pakhtunkhwa was 9085 while female population of Pakistan was 63478 while of the KP was 8651.[32]

The annual growth rate of Pakistan according to the same source for 2010 was 2.69 and of KP was 2.81. The density (persons per square kilometer) for Pakistan was 166 while of KP was 238. The geographical area (square kilometer) of Pakistan is 796 while of KP its 74.5.

The same source revealed that total Ditricts in KP are 25, total Tehsils (sub division of district) are 64, sub-tehsils (provincial) are 22, total villages called also *mauzas* according to 1998 census of Pakistan are 7337, total district administrations are 25, total Tehsils/Town municipal administrations are 55, total union councils are 987, total police stations in the province are 251 and total provincial constituencies are 99.[33]

The health statistics according to the Bureau of Statistics, Khyber Pakhtunkhwa, Government of Pakistan in 2010 shows that the total hospitals in the province are 172, dispensaries are 421, Rural Health Centers (RHCs) are 86, total Basic Health Units (BHUs) are

783, Sub Heatth Centers are 26, total beds in hospitals/dispensaries or RHCs are 16866 and total population per bed (persons) is 1461.

The data about health practitioners according to the same source shows that in 2010, there were total 3230 doctors in KP, while the population per Doctor was 7631, the total nurses were 2712 and total Lady Health Visitors (LHVs) were 981. The private medical practitioners, male were 1414, females were 95 making the total to 1509.[34]

Objective of the Study

The focus of the study was to explore the problems in the provision of primary health care at basic health units to the community people. Hence, the specific objectives of the study were: i) to find out the views and opinions of the community people i.e. beneficiaries of BHUs in District Mardan about their experiences and satisfaction with the health care services provided at BHUs of their areas; ii) to find out the hurdles or gaps in the way of access of service delivery system at BHUs; iii) to ask the beneficiaries about their suggestions for the improvement of the service delivery system of BHUs.

Methodology

The scope of this is limited to the District Mardan which is most populas district of Khyber Pakhtunkhwa, Pakistan. The demographics of district Mardan comprise of two Tehsils namely Tehsil Mardan and Tehsil Takht Bhai containing 51 union councils (UCs). As per the Executive District Officer (EDO) Health, current statistical data, there are 50 BHUs in the district.

To obtain the objectives of the study and get reliable data sample of the study was selected by multi-stage cluster sampling techniques. At first stage, we divided District Mardan into two clusters i.e. Tehsil Takht Bhai and Tehsil Mardan. As Tehsil Mardan has 37 BHUs while Takht Bhai has 13 BHUs. In second stage, we selected one third of all BHUs i.e. 13 BHUs from Tehsil Mardan and 4 BHUs from Tehsil Takht Bhai through lottery method and thus total 17 BHUs were selected. In third stage, we selected a sample of 768 respondents (beneficiaries) for study purposes by below given formula.

Ni = Ni/N * n

Ni = Total Catchments Population of Selected 25 BHUs

N = Total Catchments Population of all 50 BHUs of District Mardan

n = Total sample size of all 50 BHUs

Ni = Obtained sample size of i(th) BHU (means a particular BHU)

Thus the data was collected from both male and female of District Mardan, Khyber Pakhtunkhwa Province of Pakistan who visit Basic Health Units (BHUs) of their areas to get medical help. Using qualitative designed based on interview a total number of 768 respondents including 61 male and 707 female were interviewed. Primary data was collected with the help of interview schedules from the beneficiaries and secondary data was collected from library studies of existing literature on primary health care. Informed consent was taken from all respondents and their names were kept confidential. After collecting the data, the statistical analysis of the data was done keeping in view the objectives of the study.

Findings

The following table # 1 refers to the age of the respondents. Five groups were made with equal intervals in the range of 10 years to 60 years. Among the men respondents most of them 5.3% (41 out of 61) were young between the age of 30.1-40 years, followed by a group of 1.3% (10 out of 61) respondents between the age of 40.1-50 years and of the same numbers were 10 out of 61 in the age group of 50.1-60 years.

Looking at the women respondent's age group, most of the women numbering 44.5% (342 out of 707) were young between the age of 20.1-30 years, followed by a second group of 34.0% (261 out of 707) respondents between the age of 30.1-40 years and third group with 8.2% (63 out of 707) between the age of 40.1-50 years, then fourth group with 2.7% (31 out of 707) between the age of 50.1-60 years and the fifth group with the minimum numbers were 2.6% (20 out of 707) female respondents in the age group of 10-20 years.

Table 1: Distribution of respondents according to the gender and age

Gender	**Frequency**	**%**	**Age of the respondents in years**				
			10-20	20.1-30	30.1-40	40.1-50	50.1-60
Male	61	7.9	0 .0%	0 .0%	41(5.3%)	10(1.3%)	10(1.3%)
Female	707	92.1	20(2.6%)	342(44.5%)	261(34.0%)	63(8.2%)	21(2.7%)
Total	768	100	20(2.6%)	342(44.5%)	302(39.3%)	73(9.5%)	31(4.0%)

The beneficiaries of BHUs were interviewed for their educational status and the level of education acquired. The following table # 2 shows that among the total 768 respondents, 18.8% (144) were literate and 81.2% (624) were illiterate. From the total literate respondents, 8.2% (63) were educated up to primary (grade five) level, followed by 7.9% (61) who had acquired education till high (grade ten) level and then the minimum number 2.6% (20) were educated up to intermediate level.

Table 2: Education & level of education

Educational Qualification	Frequency	%	If literate, then level of education		
			Primary	High	FA
Literate	144	18.8%	63 (8.2%)	61 (7.9%)	20 (2.6%)
Illiterate	624	81.2%	0 (.0%)	0 (.0%)	0 (.0%)
Total	768	100%	63 (8.2%)	61 (7.9%)	20 (2.6%)

The following table # 3 shows that the employment status and monthly income of the respondents. Majority of the women beneficiaries of BHUs 90.9% (698) were house wives among whom 30.3% (233) had monthly income up to 5000 PKR, followed by 25.9% (199) who had monthly income up to 5001-10000 and 20.3% (156) who had 10001-15000, 13.0% (100) had 15001-20000 monthly income and the minimum being 1.3% (10) respondents who had up to 20000 PKR and above monthly income. Among the other respondents who were farmers 2.6% (20) had 10001-15000 PKR monthly income and some other farmers 1.3% (10) respondents who had 15001-20000 PKR monthly income and then 2.6% (20) was of self employed workers who had monthly income up to 50001-10000 PKR. And the minimum number was of the daily wagers or labourers and government employees 1.3% (10) who had monthly income up to 15001-20000 PKR.

Table 3: Employment & Monthly Income

Employment Status	F	%	Monthly Income of the respondents in PKR									
			Up to 5000	%	5001-10000	%	10001-15000	%	15001-20000	%	20001 and above	%
Self Employed	20	2.6	--	--	20	2.6	-	-	-	-	-	-
Govt. employee	10	1.3	-	-	-	-	-	-	10	1.3		-
Daily Wager/labor	10	1.3	-	-	-	-	-	-	10	1.3	-	-
Farmer	30	3.9	-	-	-	-	20	2.6	10	1.3	-	-
House Wife	698	90.9	233	30.3	199	25.9	156	20.3	100	13.0	10	1.3
Total	768	100	10	1.3	120	15.6	219	28.5	186	24.2	233	30.3

Looking at the gender and disease relationship, the following table # 4 shows that most of the men 2.7% (21) had come to BHUs for the problem of having vomiting, followed by 1.3% (10) each for the diseases of fever, malaria, cough and flu and diarrhea. Among the women respondents, most of them 22.0% (169) had come to BHU for cough and flu disease, followed by a group of women respondents 17.4% (134) who had diarrhea and 15.0% (115) women who had malaria problem, then were 10.8% (83) respondents who had vomiting, then were 10.5% (81) female respondents who came for pregnancy test, another group of women respondents 9.4% (72) who had headache and the minimum number of group was of 1.4% (11) being the heat stroke problem. If we accumulatively look at the findings of both men and women respondents diseases, most of the respondents 23.3% (179) had cough and flu problem, followed by 18.8% (144) who had diarrhea, 16.3% (125) had malaria, 13.5% (104) had vomiting, 10.5% women came for pregnancy test, 9.4% (72) had headache, 6.8% (52) had fever and 1.4% (11) had heat stroke.

Table 4: Gender and Disease

Gender	F	%	Disease							
			Headache	Fever	Malaria	Cough and flu	Vomiting	Diarrhea	heat stroke	pregnancy test
Male	61	7.9	0 .0%	10 1.3%	10 1.3%	10 1.3%	21 2.7%	10 1.3%	0 .0%	0 .0%
Female	707	92.1	72 9.4%	42 5.5%	115 15.0%	169 22.0%	83 10.8%	134 17.4%	11 1.4%	81 10.5%
Total	768	100	72 9.4%	52 6.8%	125 16.3%	179 23.3%	104 13.5%	144 18.8%	11 1.4%	81 10.5%

Referring to the gender and the means of getting treatment for diseases, the table # 5 shows that most of the men respondents 5.3% (41) goes to a homeopathic doctor for treatment of their diseases, followed by group of respondents numbering 1.3% (10) who goes to private practitioners and then the same number 1.3% (10) who goes to *hakim* (who gives herbs to cure the disease) for treatment. Among the women respondents, 74.3% (571) goes to private practitioners for treatment of their diseases, followed by 6.9% (53) who goes to hakims, another group of female respondents 3.1% (24) who goes to BHU for treatment, then 2.7% (21) who goes to homeopathic for treatment, then 1.3% (10) who goes to Rural Health Centers (RHCs) and the minimum being 1.0% (8) who goes to a *maulvi* (religious scholar) for treatment. If we look at the total, we can confer that most of the respondents 75.7% (581) goes to private practitioner for the treatment of disease, followed by 8.2% (63) and 8.1% (62) respondents who goes to *hakim* (who gives herbs to cure the disease) and homeopathic respectively, and only 3.1% (24) goes to a BHU for treatment of their diseases, and 2.6% (20) who goes to dispensary for getting medicine, and the least was 1.3% (10) and 1.0% (8) who goes to Rural Health Centers (RHCs) and a *maulvi* (religious scholar) respectively.

Table 5: Gender and from where you generally get the medical help and treatment

Gender	F	%	From where you get the medical help and treatment						
			BHU	RHC	Dispensary	Private Practitioner	*Hakim* (who gives herbs)	*Maulvi* (Religious Scholar)	Homeopathic
Male	61	7.9	0 .0%	0 .0%	0 .0%	10 1.3%	10 1.3%	0 .0%	41 5.3%
Female	707	92.1	24 3.1%	10 1.3%	20 2.6%	571 74.3%	53 6.9%	8 1.0%	21 2.7%
Total	768	100	24 3.1%	10 1.3%	20 2.6%	581 75.7%	63 8.2%	8 1.0%	62 8.1%

Referring to the distance respondents cover to reach the BHU, the table # 6 shows that majority of the respondents 66.7% (512) covered 1-3 kilometers to reach BHU for treatment and among these respondents 46.2% (355) went to BHU on foot, followed by another group of respondents numbering 10.9% (84) who went by *Tonga* (horse cart), then 9.5% (73) who went to BHU by bus. Another group of respondents numbering 30.7% (236) who covered 3.1-6km to reach BHU for treatment, among these respondents 22.8% (175) went to BHU on foot, 5.3% (41) went by *Tonga* (horse cart) and 2.6% (20) went by own conveyance. Looking at the minimum numbered group of respondents 2.6% (20) who covered 6.1 and above distance to reach BHU for treatment, among them 1.3% (10) goes on foot and 1.3% (10) goes to BHU by *Tonga* (horse cart).

Table 6: Distance of the BHU and means of commuting

Distance	Means of commuting to BHU					
	Frequency	%	On foot	By Tonga	By Bus	Own Conveyance
1-3km	512	66.7	355 46.2%	84 10.9%	73 9.5%	0 .0%
3.1-6km	236	30.7	175 22.8%	41 5.3%	0 .0%	20 2.6%
6.1 and above	20	2.6	10 1.3%	10 1.3%	0 .0%	0 .0%
Total	768	100	540 70.3%	135 17.6%	73 9.5%	20 2.6%

Looking at the findings in the following table # 7 regarding the problems faced by the beneficiaries on visiting BHU, most of the respondents 28.8% (221) said that they faced un availability of medicines, followed by 24.6% (189) who said that the doctor was absent when they visited BHU, another group of respondents 20.8% (160) who said that they did not get due attention by the doctor or staff of BHU, followed by another group of respondents 15.6% (120) who said that the doctor of BHU was not available at the time of need, then with the minimum number of group of respondents 10.2% (78) who said that the behavior of the BHU staff was indifferent to them.

Table 7: Problems faced by the beneficiaries at BHU

Problems	**Frequency**	**%**
Doctor was not available at the time of need	120	15.6
Do not get due attention by the doctor/ staff	160	20.8
Un availability of medicines	221	28.8
The doctor was absent	189	24.6
The behavior of the staff was indifferent	78	10.2
Total	768	100.0

Referring to the respondent's experience regarding getting medicine from BHU, the following table # 8 shows that majority of the respondents 70.2% (539) said that they did not get medicine from the BHU. On asking for the reasons for not getting medicine, a group of respondents 27.1% (208) said that due to the non cooperative attitude of the staff of BHU they did not get medicine, followed by another group of respondents 26.6% (197) who said they did not take medicine because it was of low quality, then the group of respondents with minimum number 17.5% (134) who said that medicine was in shortage at BHU. Only a small group of respondents 29.8% (229) who said that they get medicine from the BHU.

Table 8: Respondent's experience regarding getting medicine from BHU and reasons for not getting medicines.

Receive medicines	N	%	If no, what were the reasons		
			Shortage of medicine	Low quality of medicine	Due to the non cooperative attitude of the staff
Yes	229	29.8	-	-	-
No	539	70.2	134 17.5%	197 26.6%	208 27.1%
Total	768	100	134 17.5%	197 26.6%	208 27.1%

Referring to the information regarding the attitude of health care providers at BHUs, the following table # 9 shows that most of the respondents 49.9% (383) said that the health care providers at BHU do not pay attention, followed by another group of respondents 36.5% (280) who said that the health care providers were sympathetic and then the minimum number of respondents 13.7% (105) who said that the health care providers were indifferent to them. The table # 9 further shows about the information regarding the priority or care given by health care providers to the extremely sick, elderly and newborns, majority of the respondents 79.0% (607) said that the health care providers do not give priority to the extremely sick, elderly and newborns, followed by another group of respondents 16.7% (128) who said that the health care providers at BHU give priority to extremely sick, elderly and newborns and then a group of respondents with minimum number 4.3% (33) who chose to not give any reply by saying they do not know.

Table # 9: Respondent's views about attitude of the health care providers at BHUs and do the health care providers give priority to extremely sick, elderly and newborns

Attitude	Frequency	Percent	Health care providers give priority to extremely sick, elderly and newborns	Frequency	Percentage
Sympathetic	280	36.5	Yes	128	16.7%
Do not pay attention	383	49.9	No	607	79%
Indifferent	105	13.7	Do Not Know	33	4.3%
Total	768	100%		768	100%

Looking at the table # 10 which shows respondents views about do they witness any referral procedure practicing in the BHU, majority of the respondents 67.4% (518) said that the referral procedure is not practiced in the BHU, followed by 18.5% (142) respondents who said that they do not know about it, and then with minimum number of respondents 14.1% (108) who said that referral procedure is practiced at BHUs.

Table # 10: Respondent's views about the referral procedure practicing in the BHU.

Referral Practiced	Frequency	Percent
Practiced	108	14.1
Not practice	518	67.4
Do not know	142	18.5
Total	768	100.0

Referring to the stay at BHU and reason of stay, the following table # 11 shows that most of the respondents 41.4% (318) said that they have to stay 45 minutes at BHU, the reason for stay among them for 25.6% (197) was that because they had to wait for the doctor or staff, followed by another group of respondents 11.6% (89) who said they stayed in wait of getting the medicines, and the minimum number of respondents among this group 4.2% (32) who said they stayed in wait of the medical test. The second group of respondents 30.3% (233) who said that they had to stay for 30 minutes at BHU, and the reason for stay among them for 15.3% (117) was they stayed to get medicine, followed by another group of respondents 10.4% (80) who stayed in wait of doctor or staff, and then with minimum number among this group was of 4.6% (36) who said they stayed in wait of medical test. The other group of respondents 14.4% who waited for 15 minutes, and among them 9.5% (72) stayed in wait of doctor or staff, followed by another group in this category with 2.8% (22) who stayed in wait of medicine and then with minimum number of respondents with 2.1% (16) who stayed in wait of medical test. The minimum number category of respondents 13.9% (107) who stayed for 60 minutes in the BHU and about the reasons for stay most of the respondents among them 5.8% (45) said they stayed in wait for doctor or staff, followed by 5.3% (40) who stayed in wait of medical test and then with the minimum number 2.8% (22) who stayed in wait of getting medicines.

Table 11: Stay at BHU and reason of stay

Time	Frequency	%	Reasons of stay		
			Wait for Doctor or Staff	Wait for medicine	Wait for test
15Minutes	110	14.4	72 (9.5%)	22 (2.8%)	16 (2.1%)
30Minutes	233	30.3	80 (10.4%)	117 (15.3%)	36 (4.6%)
45Minutes	318	41.4	197 (25.6%)	89 (11.6%)	32 (4.2%)
60Minutes	107	13.9	45 (5.8%)	22 (2.8%)	40 (5.3%)
Total	768	100.0	394 (51.3%)	250 (32.5%)	124 (16.2%)

In response to the question that if the waiting area is available for patients at BHU, the following table # 12 shows that majority of the respondents 96.5% (741) said that there is no waiting area available for patients at BHU and only the minimum number of respondents 3.5% (27) said that waiting area is available for patients at BHUs. The table # 12 further shows regarding ensuring privacy of the patients at the time of consultation, majority of the respondents 82.4% (633) said that privacy is not ensured of the patient at the time of consultation and only a minimum number of respondents 17.6% (135) said that privacy is ensured of patients at the time of consultation.

Table 12: Respondent's views about availability of waiting area for patients at BHUs and ensuring of privacy at the time of consultation.

Waiting area available	Frequency	Percent	Privacy ensured	Frequency	Percentage
Available	27	3.5	Yes	135	17.6
Not available	741	96.5	No	633	82.4
Total	768	100.0		768	100

Referring to the awareness regarding the health session in the BHU, the following table # 13 shows that majority of the respondents 78.8% (605) said that they are unaware about the health session in BHU while only 21.2% (163) said that they are aware of the health session at the BHU, and among this category of respondents who are aware of health sessions, only 17.2% (132) had attended that health session at the BHU and 4.0% (31) have not attended the health sessions at the BHU.

Table 13: Awareness regarding the health session in the BHU.

Are you aware of health education sessions	Frequency	%	If yes, have you attended that sessions	
			Yes	No
Aware	163	21.2	132 (17.2%)	31 (4.0%)
Unaware	605	78.8	0 (0%)	605 (78.8%)
Total	768	100	132 (17.2%)	636 (82.8%)

Referring to the awareness about the presence of LHVs/LHWs at the BHU, the following table # 14 shows that majority of the respondents 55.9% (429) said that they are aware about the presence of LHVs/LHWs at the BHU and only 44.1% (339) said that they are unaware about the presence of LHVs/LHWs at the BHU. Looking further at the table # 14 regarding respondent's opinion about LHVs/LHWs home visits and the frequency of these visits, majority of the respondents said that the LHVs/LHWs do not visit the homes regularly. A close number of respondents 47.5% (365) who said that LHVs/LHWs visit homes regularly, and about the frequency of these visits 28.3% (217) said that they visit homes on monthly basis and 19.3% (148) said they visit homes weekly, then there were a minimum number of respondents 1.3% (10) who gave no reply to this question.

Table 14: Awareness about the presence of LHVs/LHWs at the BHU and LHVs/LHWs Home visits

Information about LHV/LHWs	Frequency	Percent	Home visits of LHVs/LHWs	Frequency	Percentage	If visit regularly then after how many days?	
						Weekly	Monthly
Have information	429	55.9	Visits regularly	365	47.5	148 (19.3%)	217 (28.3%)
Do not have information	339	44.1	Do Not visit regularly	403	52.5	0	0
Total	768	100.0		768	100	148	217

Referring to the information about the health committee/supporting group, the following table # 15 shows that majority of the respondents 50.0% (384) said that they do not have information about the health committee/supporting group at BHU, while a close number of respondents 48.7% (374) gave no reply to this question, and the minimum number of respondents 1.3% (10) said they have information about the health committee/supporting group at BHU.

Table 15: Respondent's views about having information about Health Committee/Supporting Group at BHUs

Information about Health Committee	Frequency	Percentage
Have Information	10	1.3
Do Not Have Information	384	50.0
No Reply	374	48.7
Total	768	100.0

Discussions

The findings about the beneficiaries of Basic Health Units (BHUs) suggest that among the total 768 beneficiaries (including 61 male and 707 female) of BHUs of District Mardan, most of the male were young of age group 30.1-40 years and most of the women were younger than men of age group 20.1-30 years. This shows that young generation of the area goes to BHUs for taking medical help when they suffered from any diseases. The educational characteristics of these respondents were such that most of them were illiterate and only a small number were literate up to primary level. Which might be due to non availability of educational facilities in most of the rural areas of District Mardan and if such facilities are available they are so far away

that most of the people don't have access to them. One of the other factors being illiterate respondents was as most of the beneficiary respondents of this study were women and it is a common practice in the area that females are not allowed to go out of their homes and so they cannot go to schools and colleges and remain illiterate. And only a few girls complete till primary level education and then are not allowed to pursue higher education as they grow up and are restricted to go to far away schools because of strict *purdah* system prevalent in the district.

About the marital status of the respondents, majority of them were married that shows the early marriage trend in the community and as most of the respondents were women so it shows that girls are married at an early age.

About the employment status of the respondents, as majority of the beneficiaries of BHUs were females so most of the respondents were house wives. Among the other respondents, some were farmers, some were self employed workers, and some others were government employees and daily wagers or labourers. About the monthly income of the respondents, majority of the female beneficiaries of BHUs were house wives who had monthly income up to 5000 PKR, this amount they earn from selling milk and other milk products of the animals they look after at their homes. Among the other respondents, most of the farmers had 10001-15000 PKR and then the self employed workers had monthly income up to 5001-10000 PKR and the minimum number was of the daily wagers or labourers and government employees who had monthly income up to 15001-20000 PKR. As the area is mostly agricultural based and most of the men are engaged in farming who earn up to 10000-15000 PKR and they give this money in the hands of their woman to look after the affairs of household as mostly the women are responsible for household management so these housewives had around twenty thousand rupees (their own and their husbands') in their hands.

About the gender and disease relationship, most of the respondents had cough and flu problem, followed by diarrhea, malaria, vomiting, then females came for pregnancy test, then headache, fever and the least reported being the heat stroke. The cough and flu problem might be due to the extreme weather conditions in the area as mostly the area has severe cold in winter and people had no means of escaping from it as the area is remote and not much developed so most of the facilities are not available in the area to escape from extreme cold weather. The other reported diseases like diarrhea, malaria and vomiting was also because of working in the fields and remaining in

the open places most of the times of the day and also because of unhygienic environment as the area is not much developed.

About the Gender and the means of getting treatment for diseases, we can say that most of the respondents (both men and women) goes to private practitioner for the treatment of disease, followed by respondents who goes to homeopathic and hakim respectively, and only a small number of respondents go to a BHU for treatment of their diseases, and some goes to dispensary for getting medicine, and the least was a group who goes to RHC and a Maulvi (religious scholar) respectively. (The reasons for not going to BHUs for treatment are discussed in the following paragraphs).

The distance respondents cover to reach the BHU, majority of the respondents 1-3km to reach BHU for treatment and among these respondents mostly went to BHU on foot, followed by another group of respondents who went by Tonga, then some other went to BHU by bus. Another group of respondents who covered 3.1-6km to reach BHU for treatment, among these respondents mostly went to BHU on foot, some went by Tonga and some went by own conveyance. Looking at the minimum number group of respondents who covered 6.1 and above distance to reach BHU for treatment, among them mostly goes on foot and some goes to BHU by Tonga. This shows that most of the respondents covers 1-3km distance to reach BHU for treatment and mostly all respondents covering 1-6.1 and above distance to reach a BHU, goes on foot to BHU as they don't have their own conveyance and cannot afford to go by local transport which is also not commonly available in the area.

Mostly the people visiting a BHU for treatment faced the unavailability of medicines or the doctors; some also reported the uncaring attitude of the staff of BHU towards their patients. This shows that quality of services at BHUs is not ensured by the employees and the state, as it is government's responsibility to provide for medicines at the BHUs and its employees; doctors and other staff should also properly take care of their patients and be regular in their duties at the BHU. But mostly the staff of BHU is appointed at far off place from their homes and due to non availability of public transport and personal conveyance they had difficulty in coming to the BHUs and also as they are paid nominal money in response to their services and so they are not honest with their profession.

About the information regarding the priority or care given by health care providers to the extremely sick, elderly and newborns, majority of the respondents said that the health care providers do not give priority to the extremely sick, elderly and newborns It can be said

that the health care providers at the BHUs do not give proper attention and care to the extremely sick, elderly and newborns which is against the ethics of the profession of medicine also.

As the main theme of the BHU's are the referral means that the patient will come first to the BHU, if the facilities are not present to deal with his illness or the disease is complex and need more expert attention and care, the patient will be referred to Rural Health Care Centers (RHCs) or D-type hospitals because the RHC's and the D-type hospitals have the indoor and outdoor facilities with specialization. If the facility or the care at the RHC or D-type hospital couldn't fulfill the patient, the RHC staff will referred him/her to the Tehsil hospital and then to the District hospital followed by the tertiary care units.

The stay at BHU and reason of stay, most of the respondents said that they have to stay 45 minutes at BHU, the reason for stay among them was that because they had to wait for the doctor/staff, followed by another group of respondents among the same category who said they stayed in wait of getting the medicines, and the minimum number of respondents among this group said they stayed in wait of the medical test. The second group of respondents who said that they had to stay for 30 minutes at BHU, and the reason for stay among them for some was that they stayed to get medicine, followed by another group of respondents among the same category who stayed in wait of doctor/staff, and then with minimum number among this group was of who said they stayed in wait of medical test. The next group of respondents who waited for 15 minutes, and among them some stayed in wait of doctor/staff, followed by another group in this category who stayed in wait of medicine and then with minimum number of respondents who stayed in wait of medical test. The minimum number category of respondents who stayed for 60 minutes in the BHU and about the reasons for stay, most of the respondents among them said they stayed in wait for doctor/staff, followed by some who stayed in wait of medical test and then with the minimum number who stayed in wait of getting medicines. So it can be said that most of the beneficiaries of the BHUs had to stay for 45 minutes maximum to get the treatment from the BHU and its staff. And among all types who waited for 15-60 minutes, mostly waited for the doctor or the staff to take care of them for the treatment of their diseases.

In response to the question that if the waiting area is available for patients at BHU, majority of the respondents said that there is no waiting area available for patients at BHU and only the minimum number of respondents said that waiting area is available for patients in BHUs. This is another setback in the provision of services at BHU as

mostly the patients as discussed earlier had to wait for maximum 45 minutes for the doctors and there is no place/room for them to sit while waiting that could affect their suffering and can increase their pains of being ill. Regarding ensuring privacy of the patients at the time of consultation, majority of the respondents said that privacy is not ensured of the patient at the time of consultation and only a minimum number of respondents said that privacy is ensured of patients at the time of consultation. This shows that human factor and professional ethics are not considered while treating patients at BHUs as most of them were not provided with privacy during the time of consultation and as most of the respondents interviewed were women so this shows that women rights of confidentiality and respect were not taken care of at BHUs.

The awareness regarding the health session in the BHU, majority of the respondents said that they are unaware about the health session in BHU while only a small group of respondents said that they are aware of the health session at the BHU, and among this category of respondents who are aware of health sessions, only some had attended that health session at the BHU and a significant number of respondents among them have not attended the health sessions at the BHU. This shows that majority of the BHUs are not providing health care sessions to the community it serves. And this is evident from above findings that BHUs are only providing curative services and not the preventive services that's also compliment this findings.

The awareness about the presence of LHVs/LHWs at the BHU, majority of the respondents said that they are aware about the presence of LHVs/LHWs at the BHU and a significant number of respondents said that they are unaware about the presence of LHVs/LHWs at the BHU. Regarding beneficiaries' opinion about LHVs/LHWs home visits and the frequency of these visits, majority of the respondents said that the LHVs/LHWs do not visit the homes regularly. This shows that people are mostly aware of the presence of LHVs or LHWs at BHUs but these LHVs and LHWs do not visit the homes of the people of community served by the BHU regularly and only a small number of respondents said that LHVs and LHWs pay visit on monthly basis.

For strengthening and empowering the BHUs, the Government has planned to setup a health committee or supporting group which should consists of the Medical officer of the concerned BHU, EPI technician, LHW, Female lady councilor, Nazim/Naib Nazim, Religious leader and other influential's of the local area. They have to meet on monthly basis and evaluate the performance of the BHU and have to submit their suggestions to the EDO health of the concerned

District. But most of the respondents do not have any information about this health committee which shows that these committees are not in functional position and are not performing their duties for the services of the communities they serves.

Conclusion and Suggestions

Majority of the people i.e. 75% of our country live in villages, it is necessary for the government of Pakistan to provide a satisfactory health cover to the rural population, by setting a number of rural health centers and Basic Health Units to provide curative and preventive treatment to villagers at their door step. The following are some suggestions for the improvement of BHUs. Medicines provided to BHUs are of low quality and also insufficient to meet the requirement of the target population therefore, the government should provide good quality medicines and in good quantity to the BHUs. There is a shortage of equipment in the BHUs; even the very basic instruments are not available in the BHUs. Therefore, it is necessary that the government should provide basic medical instruments to the BHUs.

Environment & location of the BHU should be improved. Most of the BHUs are built at surplus value prices of land, 60% were built outside the villages and in graveyards. When establishing a BHU, the department should purchase suitable land. These should be near to the main road. This will attract doctors for working and living in the premises of BHUs and public would also be benefited as they will have easy access to the BHUs. Almost fifty percent of the populations of our country are female. They have their own problems. They hesitate to tell their problems to male doctors. In the BHUs only LHVs are appointed, they are also in-experienced. So, along with male medical officers, a female medical officer should also be appointed in each BHU. Both will work as a team and this may help to overcome the health problems of the public.

About 60% of the population of our country is illiterate. So, they have no knowledge about the BHUs, or health services in the BHUs. The mass awareness of public is very necessary through print media (Newspaper etc.) and electronic media (TV, Radio etc.) by the government about provision of health facilities in the BHUs. In most of the areas the LHVs did not pay home visits which results in the misconception of the community about the health outlets. LHVs should be made to visits the expectant mothers over a month to give them information's about hygiene and also about caring and raring of their children. The government should provide the security to the staff members but especially to the LHVs while working in the field.

The trend of consulting and taking medicines from BHUs as shown by the study was among the young married women whereas young men do not like to go to BHUs for check up and also the old women were also not the beneficiaries of the BHUs. The former generally go to consult for cough and flu or gynecological reasons and the later mostly the young men prefer to go to private clinics for treatment and the old women being infirm cannot cover the distance of 1-3 kilometers in the absence of any reasonable transport to go to these BHUs for consultations. The most of the BHUs were reported providing only curative services and not the preventive care. The majority of the beneficiaries of BHUs complained about lack of availability of medicines and non cooperative attitudes of medical practitioners at BHUs and the study also revealed that the aged, new born and extremely sick were not given preference at BHUs. The beneficiaries also complained about the non availability of waiting areas at BHUs as they have to wait for almost forty five minutes for their turn to get treatment at BHUs.

The lack of efficacy of the BHUs was also evident from the findings that most of the beneficiaries of the BHUs were not aware about the health care sessions being conducted at any of the BHU they consulted with, nor they were aware about the existence of health committee or supporting group functioning at BHUs. The beneficiaries also complained that lady health visitors and lady health workers seldom visit homes of the community members. This all calls for improving the status and structures of BHUs in the country by making available latest and quality services for patients like availability of quality medicines, provision of waiting areas for patients, referrals to RHCs or DHQs at the time of need and providing incentives and security to the staff of BHUs to effectively perform their duties.

The lady health visitors and lady health workers should also visit the homes of the community people regularly to aware the women of the basic health care about themselves and the other members of the household. As in Pakistani society mostly women are responsible for doing the household chores and caring for most of the needs of the family especially children so the role of lady health visitors and lady health workers is most important in terms of making the woman of the house aware and informed to take care of the health needs of the family. The health department should also emphasize on providing effective primary care services through these BHUs so the common people of the country can get the health care near their homes and do not have to travel long distances to get basic health needs.

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