

# Socio-Economic Determinants Of Female Satisfaction With Basic Health Units (Bhus) Of Punjab, Pakistan

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## ABSTRACT

The study's goal was to investigate female patient satisfaction with socioeconomic variables in rural healthcare services. The methodology of the research was quantitative. The cross-sectional survey method was used to conduct the study. The population of the study was the beneficiaries of BHUs in Punjab. A representative sample size of 160 respondents was selected from 16 BHUs by using a convenient sampling technique from Punjab Province. The structured questionnaire was used as a tool for data collection. The data were analyzed using descriptive statistics. According to the empirical findings from a socioeconomic standpoint, the majority of respondents with low levels of education and income attended BHUs regularly for treatment. The study concluded that BHU services were economically affordable for the majority of the rural population due to their free-of-cost services. On the whole primary healthcare services at the BHU level were satisfactory due to the availability of staff, affordability of services, and accessibility of Services for the community. There was an issue of non-availability of doctors and checking of patients by medical technicians, dispenser, and LHV was not satisfactory. BHUs were lacking in medicines, People were not getting medicine from the BHU due to the non-availability of medicines. Limited numbers of medicines were available at BHU which was not sufficient for people. The situation of medical equipment was also not properly available at the BHUs. The study determined that vaccination was better due to one of the main health facilities at BHUs in Punjab. The study concluded that there is a need to improve the BHU services & facilities for more satisfaction in rural communities.

**Keywords:** Socio-economic determinants, Basic Health Units (BHUs), Satisfaction, Rural Health Centres (RHCs), Tehsil Headquarter Hospitals (THQs), District Headquarter Hospitals (DHQs), World Health Organization (WHO), Primary Health Care (PHC), Lady Health Workers (LHWs).

## I. INTRODUCTION

Pakistan is a developing country with insufficient infrastructure and limited

resources. Government spending on health is insignificant in terms of GDP. For the efficient implementation of primary health care services, adequate facilities, sufficient

equipment, competent workers, adequate technology and medications, sustainable finance mechanisms, community participation, and inter-sectorial coordination are all required (Ali & Panezai, 2021, Savul, Naeem & Naseem, 2018).

Every nation has a healthcare system in place to address the unique healthcare needs of its populace within its own social and cultural context. The major goal of the healthcare system is to increase patient satisfaction by offering fair, efficient, and easily accessible healthcare. A patient's or consumer's pleasure is a nuanced and broad concept that takes into account unique perspectives, expectations, and experiences. A person's subjective emotion in which they compare their evaluation (i.e., experience) of easily accessible healthcare to their expectations is called satisfaction. It is defined as "a healthcare recipient's reaction to salient parts of his or her experience of a service."

Health services are an important part of the basic facilities that must be made available to people to achieve the nation's goal of improved health. Deprivation of basic health facilities indicates a country's poor health status; therefore, improving the health status of its citizens should be a top priority for countries seeking to improve their human development. The health system is dynamic and vital to the healthy development of individuals and societies (Kruk et al., 2018).

Patient satisfaction is strongly influenced by patient experience. Almost all patient satisfaction surveys undertaken across the world aim to assess the patient's experience with the healthcare system to enhance the quality of care. The World Health Organization views patient experience with the healthcare system as an indicator of the system's responsiveness. The system's performance, or rather, responsiveness, is measured by an overall increase in the health of those served, assuring equity and efficiency while

safeguarding individuals from catastrophic costs (Berkowitz, 2016).

Patient satisfaction, healthcare quality, and the patient's personal experience are the pillars of a responsive healthcare system. When someone seeks medical attention, the response has to do with how they are treated and the environment they are in. Eight factors of patient experience are used to gauge the responsiveness of the healthcare system. All of these response variables are significantly and favorably connected to patient satisfaction. The patient experience explains 10% of the difference in patient satisfaction among nations, including those with comparable health outcomes and healthcare systems (De Man et al., 2016).

Pakistan is known for its rapid population growth, high newborn mortality, and child mortality rates, as well as its issues with infectious and non-infectious diseases. Similarly, a high child population, a low rate of skilled birth attendance, illiteracy, malnutrition, and inadequate access to emergency healthcare facilities are primarily caused by undernourishment, severe respiratory infections, diarrhea, and infectious and immunization-avoidable diseases. (2015) Majrooh, Hasnain, Akram, and Siddiqui.

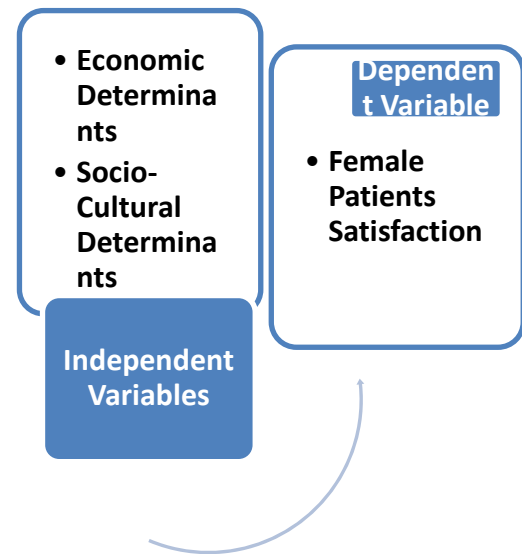
In, Pakistan, about 5464 BHUs have been established in rural areas. (Economic Survey of Pakistan, 2016). Additionally, there are 1168 hospitals, while 5696 dispensaries are working. Further 675 RHCs are established for the delivery of healthcare services. The situation of doctor ratio is pitiable as one doctor for 1048 people. Further, the condition of hospital beds is deplorable as one bed in a hospital is for 1615 persons. The indications show clearly insufficiencies predominantly in the case of doctors and hospital beds (Mumtaz et al., 2020).

Health Department is the functioning level in the community health sector in Pakistan. It provides therapeutic services and preventive healthcare services in routine to the

patients. Furthermore, execution of supervisory legislature and quality assurance of amenities are other significant tasks of health departments at the Union Council & Village Level.

Primary healthcare was a new line of methods that came on the approach of Health by the People and placing the people's health in the hands of the people. PHC approach was accepted and welcomed by the member countries of WHO with the idea to achieve "Health for All". To achieve the goals of health for all Government of Pakistan has provided preventive, curative, primitive, and rehabilitated services with the collaboration and full participation international of donor agencies like WHO, UNICEF, World Bank (Akram & Khan, 2007). Emphasis on Basic Health units, Rural Health centers may be expected to improve health consequences through better access to apposite services, with reduced cost of medicines and reduced inequities (Ibrar, 2015).

In their study, Kurji, Premani, and Mithani (2016) discovered that Pakistan's healthcare system is thriving and that several reforms have been implemented since last year. The researcher made a systematic review of national and international literature in which it was identified that the healthcare delivery system of Pakistan is making positive things in making health policies and improving health infrastructure by making of BHUs and RHCs. But these programs are limited in numbers as to the increased population of Pakistan,



therefore, the PHC system is not well-organized. Several flaws like pitiable governance, poor quality of health information management system, absence of access, and uneven resources in a health system. Additionally, the system has poor monitoring, poor policy implantation, and health planning. Moreover, the staff was lacking in training. On the other hand, the healthcare system is improving over time, but the improvement is very slow in this sector. Therefore Pakistan has to take substantial steps and initiatives for the healthcare system improvement.

The ideal theoretical framework for the ideal health system is the Primary Health Care (PHC) Approach. According to a statement made in 1978 in Alma-Ata, "vital health care is promoted based on practical, methodologically sound, and socially acceptable methods and technology, made generally available and reasonable at an affordable cost" (Batista, et al., 2016).

The PHC methodology is also more innovative and progressive than the usual "primary level services" provided through neighborhood clinics and mobile services. According to Kama (2017), it envisions an integrated referral system from the rural

community to the best metropolitan healthcare facility accessible.

PHC service is a significant concern for the gradually increasing population first and foremost in developing countries. Rural and urban areas in developing countries are experiencing extraordinary evolution for periods. The growing population is allied with the increasing demand for healthcare services along with all sorts of other structures and public service delivery obligatory to ensure the basic quality of life (Alzaied & Alshammari, 2016).

International health organizations provided support to developing nations, including Pakistan perhaps, to attain the key objectives in the framework of basic healthcare. This was especially necessary in rural areas, where the majority of the population resides. In Pakistan and other poor nations, the idea of achieving the goals of primary healthcare was short-lived (Sarfraz et al., 2016).

The healthcare delivery system in Pakistan is based on three-tiered levels with a variety of community health interventions. BHUs and Rural Health Centres (RHCs) make up the primary healthcare system at the basic level. Tehsil Headquarter Hospitals (THQs) and District Headquarter Hospitals (DHQs), which provide serious, ambulatory, and inpatient care, make up the secondary healthcare system. Teaching hospitals make up the tertiary healthcare system (Akram, 2007; JICA, 2012). The levels of healthcare systems are Primary, Secondary & Tertiary healthcare systems.

In the UNICEF and WHO joint health policy in 1965, the term "basic health services" was used for the first time. Basic Health Services are considered a network of structured, health Units of efficiently selected collective groups to carry on the health of the area and the availability of this professional and supportive officer (WHO, 2015).

As Basic Health Units were established with special attention to the health of the rural population, whereas expenditure by the Government on Rural infrastructure, Equipment, medicine, and human resources, in rural centers remained very small. The state is spending a very low health budget on BHUs as compared to secondary & tertiary healthcare (Soofi et. 2017).

The Basic Health Unit (BHU) is a health facility situated in rural Union Council. A BHU has a house for the doctor and employees as well as an office building. BHU is considered for primary healthcare, which includes functions of Treatment & medication of the rural population. In addition, BHU also provides health education, vaccination, and antenatal care for women and children (Aziz & Hanif, 2016).

The CEO (Health) is in charge of the BHUs' administrative control, financial administration, monitoring, and oversight. Across the province of Punjab, 2,496 BHUs are working. BHUs are the first-stop health facility in rural households for seeking treatment and are considered to provide health services to the population at large. A BHU almost serves the population of one union council; there is a difference in the number of BHUs at Level. The distribution of BHUs is according to the average population of the area. A BHU roughly serves an average of fewer than 20,000 rural populations. The BHUs are working with a limited number of staff who provides primary healthcare services (Aziz & Hanif, 2016).

Doctors, female health visitors, dispensers, and occasionally health technicians work in a BHU. Each BHU also has a vaccination, a school health and nutrition supervisor, and five to six lady health workers (LHWs). Door-to-door preventive healthcare services are offered by LHWs, and they also carry out awareness programs (Majrooh et al., 2015).

All over the world, those people who have less access to resources of health who are

socially disadvantaged and vulnerable, than the people who are in privileged social classes. Vulnerable and social disadvantage people formerly become sicker and die earlier than the advantaged social class. The gaps in health equity are increasing despite extraordinary global wealth and progress in technology (Tangcharoensathien, 2018).

There are many issues at the level of the primary healthcare system in which financial and human resources are the major ones. Lack of capacity in the health system detains the ability of staff to provide healthcare services to the local community. Additionally, the lack of laboratory equipment, pharmaceuticals, and staff at basic health units and rural health centers continues to harm the health system (Aziz & Hanif, 2016). This is especially true for female doctors, nurses, and other health workers.

Usman et al. (2015) discussed that in developing countries like Pakistan which are deprived of resources, the impact of basic health units on local communities to reduce their burden of disease cannot be ignored. BHUs are the main contributor and foundation tiers at the community level to provide accessible services in the healthcare substructure. There is a wide-ranging system of primary healthcare services in the form of BHUs in Pakistan.

Moreover, the absence of staff and ruthless behavior in BHUs with the patients make them depressed and trustworthiness among local communities (Batoool & Ahmed, 2016). Hamad, & Ahmed (2017) Due to the absenteeism of medical officers, the junior staff like dispensers & Nurses make check-ups of the patients and advise them on medicines as per their poor understanding. It is proposed that radical policies must be announced to augment the efficiency of BHUs in providing basic health services to the indigenous populations of Pakistan (Hamad & Ahmed, 2017).

In Pakistan and other developing countries, the remoteness of healthcare facilities gets worse when it joined shortage of transportation with pitiable condition roads. Poor Physical access and lack of proper transport undoubtedly make a great hurdle in the utilization of health services (Memon et al., 2015). As an outcome of the distance issues, becomes strongly followed by other features such as accessibility of conveyance, and overall cost of a single round trip, and also affects the mobility of females in rural areas.

According to Usman (2015) among the numerous challenges faced by Pakistan's health system; the shortage of skilled healthcare workers is a crucial one. As a consequence of insufficient infrastructure and pitiable incentive packages, a large figure of doctors, nurses, and other health specialists did not join or go to the private sector (Memon et al., 2015; Shaikh & Hatcher, 2004). As a result of poor infrastructure, and poor compensation packages, the primary health sector of Pakistan is facing a shortage of staff and also with its retention and availability of staff in the needy areas.

### **1.1 Statement of the problem**

A healthy community is the foundation upon which an economically viable society can be built, as unhealthy people are unlikely to contribute effectively. Patient satisfaction is strongly influenced by patient experience. Socio-economic determinants may play a vital role in female satisfaction with healthcare services in rural areas of Punjab by contributing to the improvement of primary healthcare services after assessing and evaluating the services of BHUs. Access to healthcare is a fundamental human right in every country. Pakistan's healthcare system is working hard to meet people's basic health needs. So far, the situation of access to

healthcare as a basic human right has failed in the rural areas of Punjab. Because of the growing number of patients in public hospitals, it is the responsibility of the Government to ensure the revival and easy access to health care at the grassroots level. In Pakistan, very few researches were carried out to explore the factors affecting the satisfaction level of the patients at BHUs of Punjab. To break the ice, the study was carried out to explore the socio-economic determinants of female satisfaction with basic health units (BHUs) in Punjab, Pakistan.

### 1.2 Objectives of the Study

The study's primary goals will be to examine the healthcare facilities, issues, and services that Basic Health Units (BHUs) offer to rural residents.

- To study the socio-economic determinants for the patients accessing healthcare services in rural Punjab.
- To assess the level of female patient satisfaction in connection to the provision of healthcare services.
- To study the socio-economic determinants of the female patients' satisfaction (beneficiaries) visiting rural healthcare services
- To examine the challenges confronted by the rural population in the aspects of health services

### 1.3 Hypotheses of the Study

**H1:** There is a correlation between sociocultural determinants and patient satisfaction at Basic Health units

**H2:** There is a correlation between economic determinants and the satisfaction of patients towards services of Basic health units

### 1.4 Conceptual Framework

The model of Healthcare utilization mainly transacts gender, economic status, education level, availability of health facilities,

affordability, access to healthcare facilities (distance), the behavior of health staff, and authority of healthcare provider. The current study also sees these variables as part of the research with context to evaluate basic health services in rural areas. These variables play a significant role in improving the health status of un-served and underprivileged communities in rural areas.

### 1.5 Study's research questions

1. What are the demographic characteristics of rural female patients visiting healthcare services?
2. Can female patients economically afford the services of Basic health units in your district?
3. What is the existing situation of Basic health units for the rural population?
4. What are the socio-economic determinants of rural women visiting healthcare services?
5. What kind of services are available for the patients at Basic Health Units in your district?
6. Does the services of basic health units accessible to the rural population in your district?
7. How is the behavior of staff towards patients at basic Health Units?

## 2. RESEARCH DESIGN

The research design is an action that is the basis of the whole study. The study was conducted in BHUs of Punjab districts. The study was quantitative, so quantitative strategies and methods were utilized to lead this research work. Being quantifiable research it rests on specific to general approach. The cross-sectional survey method was used to conduct the study. The cross-sectional method was best to be used in this situation in which the researcher collected data without influencing the setting.

The targeted population of the study was the recipients of healthcare services from

BHUs of the s Punjab who visited the BHUs during the time of data collection by the researcher. BHUs were providing healthcare services to the rural population in the area. The data on BHUs were collected from the Office of Health Officers of Punjab. Further, it was also validated through the PHSRP website. There were 933 BHUs in Punjab (PHSRP, 2018 & [https://phfmc-punjab.org/page/pages/quick\\_overview](https://phfmc-punjab.org/page/pages/quick_overview)). The target population was homogenous in the context of rural areas. The data were collected from that population group which was above 18 years of age.

The study was carried out in 16-BHUs of 4 districts of Punjab Province. These 04 districts (Gujranwala, Vehari, Faisalabad & Lahore) were selected through a random sampling technique. Furthermore, a multistage sampling technique was used to take a sample of final respondents. Due to the various BHUs in these districts, the researcher selected four (04) BHUs from each district to make the representation of the whole. Secondly, according to the nature of the study, a convenient sampling technique was used to select respondents, which is the non-probability technique of sampling. This technique was used due to its handy and larger population. Further, the sampling frame of the population was also not known and possible. Therefore this sampling technique was best to assess the services of BHUs. From these BHUs, 10 respondents were selected from each BHU conveniently with their consent for better generalization of results. So the whole sample size was 160 for the current quantitative type of study.

The study was quantitative. The researcher used a cross-sectional survey method to collect data. This method was best to be utilized to gather information from the huge pool of cases. A structured questionnaire was developed for collection due nature of the

inquiry, the rural population, and the objectives of the study. A structured questionnaire was organized which contained close-ended questions. It consisted of respondents' demographic profile including age, and level of education, and questions related to the objectives of the study as elaborated below in detail.

The researcher conducted face-to-face interviews with each respondent to fill up the structured questionnaire. As the majority of the respondents of the study were illiterate, therefore the method of interviews with respondents was adopted. The researcher personally filled in the questionnaire and additionally, field notes were also made in the field to enhance the accuracy and credibility of the information.

The pre-testing of questionnaires was applied to 20 respondents of the sample. The respondents of pre-testing were not considered in the real sample of the study. These respondents were excluded from the study sample. During the pre-testing phase, general conversations with respondents were held to improve the validity and reliability of the questions under the study's objectives. The creation and construction of a structured questionnaire benefited greatly from the pre-testing phase. With the help of pre-testing and a literature review of studies, an appropriate tool for data collection was established. In this way, the final tool was composed to gather data for the study.

The concept of reliability displays an instrument's consistency as a data-gathering tool in producing similar results under constant conditions. In the current study, the reliability of the data collection tool was ensured through the value of Cronbach's alpha. According to Nunnally, J.C. (1978), the minimum value of the alpha coefficient may be considered 0.6 as the standard value against the measure. The Cronbach alpha values were greater than 0.6 in

respect of each item construct as well as the overall instrument. Therefore the questionnaire was able to produce consistent results.

### 3. DATA ANALYSIS

Analysis of data is the method of reviewing, cleaning, modeling & interpreting the data. It helps the researcher to highlight useful information, conclude, suggest recommendations from data, and support decision-making. Descriptive statistics were used to present the results of the present study. Descriptive statistics were used to present the results by the frequency and percentage tables. Explanations of every table were provided in detail to present the results.

Research ethics were prodigiously given importance in the current research. Therefore a lot of emphases was paid to research ethics throughout the progression of this research study. Research ethics were properly followed by the researcher during the conduct of the current study, informed Consent, Voluntary participation, and Confidentiality of data.

The study was quantitative therefore; descriptive statistics like frequency, percentage, and mean of the findings were drawn. Further regression analysis was also performed to measure the association between variables of the present study.

**Table No.1 Distribution of the respondents as per Age Group**

| Age Group    | No. of Respondents | (%)          |
|--------------|--------------------|--------------|
| 18-27        | 45                 | 28.0         |
| <b>28-37</b> | <b>68</b>          | <b>42.66</b> |
| Above 37     | 47                 | 29.33        |
| <b>Total</b> | <b>160</b>         | <b>100%</b>  |

According to **Table No.1**, the plurality of respondents (42.66%) were in the 28–37 age range, while 29.33% were over the age of 37. 18 to 27-year-olds made up 28% of the population. Only participants older than 18

years old were chosen for this study's data collection. To increase the reliability of the findings in the evaluation of BHUs, this criterion was adopted.

**Table No. 2 Distribution of the Respondents as per their Qualification status**

| Qualification status | No. of Respondents | (%)         |
|----------------------|--------------------|-------------|
| Illiterate           | <b>56</b>          | <b>35.0</b> |
| <b>Primary</b>       | 30                 | 19.3        |
| <b>Middle</b>        | 16                 | 10.0        |
| <b>Matriculation</b> | 33                 | 21.0        |
| <b>Above matric</b>  | 25                 | 14.7        |
| Total                | <b>160</b>         | <b>100%</b> |

**Table No.2** indicated that the majority of the respondents 35.0 % of the total respondents were illiterate. These trends in education show that the majority of the population in the study area has a low level of education. In the same

vein, Batoool et al. (2005) found similar findings that the majority of the respondents were having a low level of education as depicted in the results of the above-stated table.



**Table No. 3 Distribution of Respondents According to their Income family income (per month)**

| Income in Rs.   | No. of Respondents | (%)         |
|-----------------|--------------------|-------------|
| Less than 25000 | 81                 | 50.33       |
| 25000-35000     | 58                 | 36.33       |
| More than 35000 | 21                 | 13.34       |
| <b>Total</b>    | <b>160</b>         | <b>100%</b> |

**Table No.3** describes that the majority of the respondents (50.33%) have an income less than Rs. 25000. The respondents (36.33%) have a family income between Rs. 25000-35000. Only 13.34% of respondents were having an income of more than 35000 rupees. The data depicted that people in the study area belong to low-economic status families, as the majority of the respondents were having very low levels of

income. This result is supported by Akram & Khan (2007) who described that people from rural areas visiting BHUs have low levels of income. Furthermore, because of the shortage of finance in Pakistan, poor people face catastrophic health expenditures and as a result, the poor become poorer (Kurji, Premani & Mithani, 2016).

**Table No. 4 Distribution of respondents regarding their purpose of visit to BHU**

| Purpose of visit          | No. of Respondents | (%)         |
|---------------------------|--------------------|-------------|
| Vaccination               | 26                 | 16.7        |
| Blood pressure            | 12                 | 8.0         |
| Diabetes                  | 05                 | 3.3         |
| Pregnancy                 | 29                 | 18.7        |
| Family planning           | 02                 | 1.3         |
| Children checkup          | 20                 | 13.0        |
| Others (General diseases) | <b>66</b>          | <b>39.0</b> |
| <b>Total</b>              | <b>160</b>         | <b>100%</b> |

**Table No. 4** depicted that 39.0% of respondents visited the BHU for general checkups having headaches, fever, flu, etc. while 18.7% of respondents visited due to a check on pregnancy matters. 16.7% of respondents were vaccinated. From the results, it can be described that the majority of the respondents were female, who were there for female-related issues, or to check up on their children. As males are less concerned about family health care, because they went to work

for the whole day, therefore they did not visit BHU along with their family members. Healthcare services are being provided at the public & private levels. Urban areas have better access to basic health facilities whereas people living in rural areas have difficulties accessing the proper medical health facilities. As the locations of such public clinics or hospitals are not easy to access or they do not have such clinics nearby in their areas (Siddiqi et al., 2009).



**Table No. 5 Distribution of the Respondents regarding Distance from Home to BHU**

| Distance from home to BHU | No. of Respondents | (%)         |
|---------------------------|--------------------|-------------|
| > 1 Km                    | 36                 | 23.0        |
| <b>1-6 Km</b>             | <b>113</b>         | <b>71.0</b> |
| 6 > Km                    | 11                 | 6.0         |
| Total                     | 160                | 100 %       |

**Table No.5** explained the distance from home to BHU. The data showed that the majority of the respondents 71.0% have a distance of 1-6km from their home. It is considered close to their home. While 23.0% of the respondents are

nearly 1km from the BHU. Only 6% of the respondents stated that they have more than 6km distance. The results show that BHUs were close to rural communities which make them accessible to primary healthcare services.

**Table No. 6 Descriptive analysis of Economic Determinants (Financial Affordability)**

| Sr. | Item  | SD            | D             | N             | A             | SA            | Mean |
|-----|---|---------------|---------------|---------------|---------------|---------------|------|
| 1   | affordability of BHU Services                                     | 17<br>(10.6%) | 28<br>(17.5%) | 23<br>(14.4%) | 63<br>(39.4%) | 29<br>(18.1%) | 3.37 |
| 2   | I am quite willing to pay for the quality of services being given | 12<br>(7.5%)  | 47<br>(29.4%) | 12<br>(7.5%)  | 74<br>(46.3%) | 15<br>(9.4%)  | 3.21 |
| 3   | The charges for deserving patients can be waived off              | 17<br>(10.6%) | 49<br>(30.6%) | 20<br>(12.5%) | 66<br>(41.3%) | 08<br>(5.0%)  | 2.99 |

**Table No. 06** is about the descriptive analysis of various items asked in the affordability section. The mean score for “affordability of BHU services”, was 3.37, 3.21 is for “I am

quite willing to pay for the quality of services being given” while 2.99 was for the statement “The charges for the deserving patients can be waived off”.

**Table No. 7 Descriptive analysis of the availability of BHU services**

| Sr. | Items                                       | SD           | D             | N             | A             | SA           | Mean |
|-----|---|--------------|---------------|---------------|---------------|--------------|------|
| 1   | Availability of clean drinking water at BHU | 5<br>(3.1%)  | 32<br>(20%)   | 24<br>(15%)   | 83<br>(51.9%) | 16<br>(10%)  | 3.46 |
| 2   | Availability of Staff at BHU                | 13<br>(8.1%) | 35<br>(21.9%) | 30<br>(18.8%) | 70<br>(43.8%) | 12<br>(7.5%) | 3.21 |
| 3   | Doctors remain present most of the time     | 15<br>(9.4%) | 60<br>(37.5%) | 17<br>(10.6%) | 60<br>(37.5%) | 8<br>(5%)    | 2.91 |
| 4   | Available Medicine                          | 15<br>(9.4%) | 61<br>(38.1%) | 21<br>(13.1%) | 49<br>(30.6%) | 14<br>(8.8%) | 3.06 |
| 5   | Available medical equipment/diagnostic      | 11<br>(6.9%) | 66<br>(41.3%) | 16<br>(10%)   | 58<br>(36.3%) | 9<br>(5.6%)  | 3.03 |

**Table No. 07** is a descriptive analysis of various items asked in the availability section.

The first item for “Availability of clean drinking water at BHU” and the mean score for

this statement was 3.46. The data regarding the situation of clean drinking water explained that clean drinking water is one of the big issues in rural and urban areas. Therefore at the BHU level government should take proper measures in the provision of clean drinking water. The study found satisfactory conditions regarding the availability of clean drinking water at BHUs that clean drinking water was available at BHU as the statement is contradictory to Khan & Abbas (2007) that there is lacking clean drinking water at rural health facilities.

The next statement. "Availability of Staff at BHU" suggests that the mean score for this statement was 3.21. The next statement "doctors remain present most of the time" suggests that the mean score for this statement was 2.91. The next statement "Available Medicine" suggests that the mean score for this statement was 3.06. The mean score of the statement "Available medical equipment/diagnostic" was 3.03.

**Table No. 8 Descriptive Analysis of Socio-Cultural Determinants**

| Sr. | Items   | SD            | D             | N             | A             | SA            | Mean |
|-----|---|---------------|---------------|---------------|---------------|---------------|------|
| 1   | Easy Accessibility of BHU/<br>The location of BHU is quite convenient                           | 14<br>(8.8%)  | 48<br>(30%)   | 22<br>(13.8%) | 60<br>(37.5%) | 16<br>(10.0%) | 3.10 |
| 2   | Travelling Distance / The average distance of the facility from the local area is not too long. | 14<br>(8.8%)  | 55<br>(34.4%) | 18<br>(11.3%) | 57<br>(35.6%) | 16<br>(10.0%) | 3.04 |
| 3   | The local route of the automobile is also to the BHU  | 12<br>(7.5%)  | 50<br>(31.3%) | 12<br>(7.5%)  | 76<br>(47.5%) | 10<br>(6.3%)  | 3.14 |
| 4   | I do not feel any gender discrimination at BHU.   | 8<br>(5%)     | 37<br>(23.1%) | 17<br>(10.6%) | 81<br>(50.6%) | 17<br>(10.6%) | 3.39 |
| 5   | I got permission whenever I go for a check-up   | 18<br>(11.3%) | 57<br>(35.6%) | 21<br>(13.1%) | 56<br>(35%)   | 8 (5%)        | 2.87 |

**Table No. 08** is a descriptive analysis of various items asked in the accessibility section. The mean score of the statement "Easy Accessibility of BHU/ The location of BHU is quite convenient" was 3.10, 3.04 for "Travelling Distance / The average distance of the facility from the local area is not too long", 3.14 for the next statement "Local route of the

automobile is also to the BHU", 3.39 was for the statement "I do not feel any gender discrimination at BHU" and 3.87 was for "I got permission whenever I go for a check-up". The results show that most of the respondents depicted easy accessibility to BHUs. Whereas, a little number of respondents were facing difficulties to access BHU.

**Table No. 9 Descriptive analysis of Accommodation of BHU services**

| Sr. | Items  | SD            | D             | N            | A             | SA            | Mean |
|-----|--|---------------|---------------|--------------|---------------|---------------|------|
| 1   | did not wait too long                          | 17<br>(10.6%) | 47<br>(29.4%) | 13<br>(8.1%) | 67<br>(41.9%) | 16<br>(10.0%) | 3.11 |
| 2   | Infrastructure (wash Rooms, OPD, Hand washing) | 11<br>(6.9%)  | 71<br>(44.4%) | 14<br>(8.8%) | 54<br>(33.8%) | 10<br>(6.3%)  | 3.09 |

|   |  |               |               |               |               |              |      |
|---|--|---------------|---------------|---------------|---------------|--------------|------|
| 3 | There is proper bedding available for emergency treatment  | 20<br>(12.5%) | 46<br>(28.8%) | 17<br>(10.6%) | 66<br>(41.3%) | 11<br>(6.9%) | 3.01 |
| 4 | I feel relaxed and fully assisted at BHU whenever I visit. | 18<br>(11.3%) | 57<br>(35.6%) | 21<br>(13.1%) | 56<br>(35%)   | 8 (5%)       | 2.87 |
| 5 | BHU has a facility for emergency overnight stays.          | 12<br>(7.5%)  | 62<br>(38.8%) | 22<br>(13.8%) | 53<br>(33.1%) | 11<br>(6.9%) | 2.93 |

**Table No. 9** is a descriptive analysis of various items asked in the accommodation section. The mean score was 3.11 for “did not wait too long”, 3.09 for “Infrastructure (wash Rooms, OPD, Hand washing)”, 3.01 for “There is

proper bedding available for emergency treatment”, 2.87 for “I feel relaxed and fully assisted at BHU whenever I visit.” And 2.93 was for the statement “BHU has emergency facility overnight stay”.

**Table No. 10 Descriptive Analysis of the Acceptability of BHU Services**

| Sr. | Items  | SD            | D             | N             | A             | SA           | Mean |
|-----|--|---------------|---------------|---------------|---------------|--------------|------|
| 1   | The behavior of the staff at BHU is good for the patients. | 13<br>(8.1%)  | 39<br>(24.4%) | 21 (13.1)     | 73<br>(45.6%) | 14<br>(8.8%) | 3.23 |
| 2   | The overall environment at BHU is soothing                 | 13<br>(83.1%) | 39<br>(24.4%) | 21<br>(13.1%) | 73<br>(35.6%) | 14<br>(8.8%) | 3.16 |

**Table No. 10** is a descriptive analysis of various items asked in the acceptability section. For the item statement. “The behavior of the staff at BHU is good to the patients” mean was 3.23 while 3.16 was for the statement “The

overall environment at BHU is soothing”. The findings of the study show that the staff behavior of BHU with rural people was satisfactory.

**Table No.11 Descriptive analysis of satisfaction of patients regarding BHU services**

| Sr. | Items  | SD           | D             | N             | A             | SA            | Mean |
|-----|--|--------------|---------------|---------------|---------------|---------------|------|
| 1   | satisfaction regarding the behavior of staff at BHU        | 11<br>(6.9%) | 49 (30.6)     | 14<br>(8.8%)  | 76<br>(47.5%) | 10<br>(6.3%)  | 3.28 |
| 2   | satisfaction regarding the provision of medicines at BHU   | 13<br>(8.1%) | 38<br>(23.8%) | 18<br>(11.3%) | 73<br>(45.6%) | 18<br>(11.3%) | 3.24 |
| 3   | satisfaction regarding the provision of vaccination at BHU | 8<br>(5.0%)  | 47<br>(29.4%) | 14<br>(8.8%)  | 81<br>(50.6%) | 10<br>(6.3%)  | 3.25 |
| 4   | satisfaction about Cleanliness at BHU s                    | 11<br>(6.9%) | 32<br>(20.0%) | 25<br>(15.6%) | 74<br>(46.3%) | 18<br>(11.3%) | 3.23 |

|   |  |              |               |                     |               |               |      |
|---|--|--------------|---------------|---------------------|---------------|---------------|------|
| 5 | satisfaction BHU Facilities                          | 10<br>(6.3%) | 44<br>(27.5%) | 16 (10%)<br>(49.4%) | 79<br>(49.4%) | 11<br>(6.9%)  | 3.35 |
| 6 | Satisfied with the skill or training of staff at BHU | 14<br>(8.8%) | 29<br>(18.1%) | 21<br>(13.1%)       | 79<br>(49.4%) | 17<br>(10.6%) | 3.38 |

**Table No. 11** is a descriptive analysis of various items asked in the Patient satisfaction section. The mean score for “satisfaction regarding the behavior of staff at BHU” was 3.28, 3.24 for “Satisfaction regarding the provision of medicines at BHU”, 3.25 for the statement “satisfaction regarding the provision of vaccination at BHU”, 3.23 for “Satisfaction about Cleanliness at BHUs” and 3.35 for “Satisfaction BHU Facilities” while 3.38 was for the statement “Satisfied with the skill or

training of staff at BHU”. The findings described the situation regarding satisfaction with vaccination at BHU. The majority of the respondents were satisfied with the provision of vaccination at BHU. The data explained that vaccination is in a better state due to one of the main health facilities at BHUs in Punjab. Similar, results were shown by Zaidi & Nishtar (2011) that improvements have been made in child vaccination coverage in Pakistan.

**Table No. 12 Model Summary of Multiple Regression Analysis**

| Model Summary |                   |          |                   |                                |
|---------------|-------------------|----------|-------------------|--------------------------------|
| Model         | R                 | R Square | Adjusted R Square | Std. The error in the Estimate |
| 1             | .913 <sup>a</sup> | .833     | .828              | .40270                         |

a. Dependent Variable: SATISFACTION

b. Predictors (socio-economic Determinants )

Table No. 12 shows the model summary of socioeconomic Determinants in the health care system and patient satisfaction. The value of adjusted R Square is suggesting that socio-economics determinants contributed 82% to

enhance the satisfaction level of patients. It shows that there was a strong correlation between that socio-economics determinant and the satisfaction level of patients. Hence the first hypothesis is accepted that

**“There is a correlation between socioeconomic determinants and patient satisfaction at Basic Health units”.**

**Table No. 13 “ANOVA” Results**

| Model |                   | Sum of Squares | Df  | Mean Square | F       | Sig.              |
|-------|-------------------|----------------|-----|-------------|---------|-------------------|
| 1     | <b>Regression</b> | 124.613        | 5   | 24.923      | 153.685 | .000 <sup>b</sup> |
|       | <b>Residual</b>   | 24.974         | 154 | .162        |         |                   |
|       | <b>Total</b>      | 149.586        | 159 |             |         |                   |

- a. Dependent Variable: SATISFACTION
- b. Predictors (socio-economic Determinants)

The ANOVA table is also suggesting that the model is highly significant. The value of F statistics is 153.685.

**Table No. 14 Standardized Coefficients (Multiple Regression Analysis)**

| Model                       | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-----------------------------|-----------------------------|------------|---------------------------|-------|------|
|                             | B                           | Std. Error | Beta                      |       |      |
| (Constant)                  | .428                        | .113       |                           | 3.784 | .000 |
| Socio-cultural Determinants | .348                        | .068       | .388                      | 5.158 | .000 |
| Economic Determinants       | .287                        | .068       | .297                      | 4.242 | .000 |

a. Dependent Variable: **SATISFACTION**

Above mentioned Table No.14 is suggesting an individual level of contribution of each A on the overall impact on the satisfaction of patients with the 5 A's of the health care system. The B coefficient of a constant is .428 and the significance value is 0.000 which suggests overall the model is significant. Affordability contributes to 34% at a significance level of 0.000 which shows that it is a highly significant factor. The availability

factor is contributing 8 % with a significance level of .333 which shows it is not a significant factor. Accessibility contributes to 17% with a level of significance of .021 which shows it is a significant contributor. Accommodation contributes to just 4% at the significance level of .963 which suggests that it is an insignificant contributor. Acceptability contributes to 28% and the significance level is .000 which suggests it's a very significant contributor.

#### 4. SUMMARY & DISCUSSION

The study found that the majority of the respondents visit BHU frequently, due to close to home and time-saving factors. Rural communities especially the deprived and poor mostly rely on the services & facilities available nearby to them (Srinivasan & Mohanty, 2004). The current majority of the respondents have a distance of about 1-6 km to BHU, which can be considered close to their home but due to the issue of accessibility of conveyance, the cost of a visit to BHU enhanced. Treatment or checkup by a doctor is a major indicator of satisfaction for rural

people. The findings regarding the checkup, the majority of the respondents depicted that they were checked by LHV, Medical technician & Dispenser, while only a limited number of respondents said they were checked by a doctor. Khan & Abbas (2007) and Zaidi et al.(2012) stated comparable findings on the related issue. This may be due to the non-availability of doctors at BHU.

The current study results revealed that the majority of the respondents were satisfied with the behavior of staff as BHUs staff behavior is not proper with the patients. The provision of essential drugs in health centers is the key component of primary health care

programs. Some scholarly literature (Callen et al., 2013; Soofi et., 2017) about the non-provision of medicine similarly stated the results of the current study that respondents were not satisfied with the provision of medicine at BHU. The data shows the issue of non-provision of medicine at the BHU level as respondents were not satisfied with this facility. The data explained that vaccination is in a better state due to one of the main health facilities at BHUs in Punjab. Similar, results were shown by Zaidi & Nishtar (2011) that Furthermore, improvements have been made in child vaccination coverage in Pakistan.

An adequate level of access to PHC services paves the way for advancement in the quality of people's life (Glenton et.al. 2010). The rural community of the study area was having easy accessibility to BHU. A minimum number of the respondents were facing difficulties in accessing BHU due to the transportation issue and also the distance of BHU from the home. On the whole, BHU was accessible to a major chunk of the rural population.

The findings show that BHU services were affordable for the majority of the rural population at the BHU level which is one of the basic principles of PHC of rural people; they should have the affordability towards healthcare facilities (Masud, 2011). The BHUs of the study area found them in good condition regarding the availability of clean drinking water. The majority of the respondents stated that clean drinking water was available. The availability of staff at healthcare facilities leads to the privileged status of health. Further Khan & Abbas (2007) stated that health status improved with the availability of proper staff.

In the current study, it was revealed that doctor was not given proper time at BHU as compared to staff (Sarfraz et al., 2016). The study found that a lower staff dispenser, LHV was available at BHU but not at full coverage, the results show a significant gap in the availability of doctors at BHUs. Similarly,

Zaidi et al. (2012) identified a significant shortage of BHU staff at the Punjab level as indicated in the results also.

According to the results of the current study, the vast majority of respondents were happy with how health services were delivered at the BHU level. The study identified frequent reasons to visit the BHU in the study area, from which it was concluded that the majority of the respondents visit BHU due to affordability, easy accessibility, and the acceptability of staff. Also on the other hand, due to the factor of nearness to home, rural people visit healthcare facilities (Srinivasan & Mohanty, 2004).

The study identified that the non-availability of medical equipment, lack of proper infrastructure, and non-availability of doctors were the key problem for the majority of the respondents consecutively. Similarly on the whole majority of the respondents were also satisfied with the waiting time and transportation issues to reach at BHUs. Contrastingly, a related study by Usman et al. (2015) also discussed, Pakistan's lacking health resources at the local level. The reason is that the chosen and the selected BHUs are somehow in the developed region of Punjab where proper BHUs are present. This seems to be very important information from our present research study. The results are also differing from the findings of Batool & Ahmed (2017) who stated that BHUs are underutilized due to poor administration and deficiencies in infrastructure which creates problems for the effective and efficient services delivery available at Basic Health Units (Batool & Ahmed, 2017). Afzal & Yusuf (2013) believed that infrastructure levels of BHUs can strengthen the PHC system. Similarly, in the current study, it was concluded that the situation of infrastructure at BHUs as described by the respondents was adequate for patients' needs at the local level. The results also specified that the non-availability of medical equipment and also non-availability of



medicines at BHUs were not maintained properly.

The study found that in connection to regression analysis suggests that overall the dependent variables were significant against the independent variables. The affordability and accessibility showed a significant level and contributor to the satisfaction of the patients. On the other hand, accommodation and acceptability suggest that it is an insignificant contributors to the satisfaction of patients regarding the services of BHUs. Acceptability also shows a significant association with the satisfaction of patients regarding the services of BHU in the study area.

## **5. CONCLUSION & RECOMMENDATIONS**

### **A. Conclusion**

The core objective s of the study was to assess the healthcare services provided by BHUs to people in rural areas. From the current study it was concluded that the situation of primary healthcare services at the BHU level was satisfactory due to the affordability of BHU Services, quality of services being given, Availability of clean drinking water at BHU, availability of Staff at BHU, accessibility, clean drinking water all these factors were conducive. Rural communities were facing no issues regarding access to proper medical health facilities.

The empirical findings of the study suggest that most female patients were mostly there for antenatal care or to check up on their children. Further, it was concluded that people with low levels of education and income frequently visit BHUs, while people with better education and financial status are not fascinated to visit BHUs.

It was concluded that BHU services were affordable for the majority of the rural population at the BHU level due to their free-

of-cost services. Whereas some of the respondents were confronted with distance due to transportation issues in rural areas, this is a barrier to PHC and enhances cost and accessibility issues among the rural population. Moreover, the situation of the non-availability of doctors and checking of patients by medical technicians, dispensers, and LHV was somehow satisfactory. From the results, it concluded that the behavior of staff was satisfactory with patients, which accelerates the pace of achieving the goals of primary healthcare. The data concluded that vaccination was in a better state due to one of the main health facilities at BHUs in Punjab.

The study discussed that a small population of rural people was facing some issues with the accessibility of primary healthcare services, non-availability of medical equipment, and non-availability of doctors. BHUs are under-utilized due to poor administration and deficiencies in infrastructure which creates problems for the effective and efficient services delivery available at Basic Health units. Overall, the majority of the people were somehow satisfied with the provision of healthcare services. But there was a lack of some of the facilities at the BHU level from the perspective of rural people. The study concluded that the situation of studied BHUs was improved and working in better conditions for the rural communities as patients were satisfied with their services at the basic level.

### **B. Recommendation**

The primary healthcare goal is to improve the health status of poor people by giving them access to and affordability in health services.

- It is suggested that BHUs also should have emergency mobile clinics to treat patients at the doorstep.

- There should be established a laboratory at BHU to make better health facilities for rural people.
- Proper medicines in general & emergency cases should be available at BHU to minimize the economic burden of rural people.
- The health budget should be increased to maximize the healthcare facilities at the rural level.
- Frequent visits to higher authorities should be done to visit BHUs for the identification of their needs and problems.

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