ORIGINAL ARTICLE

Primary care and health system performance in Pakistan: A study of basic health units of South Punjab

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Abstract

Objective: To analyse the health system performance in the provision of primary health care in Pakistan's southern Punjab region.

Methods: The cross-sectional, questionnaire-based study was conducted in October 2014 in three tehsils of district Multan in the Punjab province of Pakistan, and comprised recipients of primary health care at basic health units. SPSS 16 was used for data analysis.

Results: Of the 77 basic health units, 19(24.7%) were selected for this study. Of them, 4(23.5%) were located in Jalalpur Pirwala, 3(17.6%) in Shujabad and 12(70.6%) in Multan Sadar. Besides, of the 300 respondents interviewed, 72(24%) were from Jalalpur Pirwala, 48(16%) from Shujabad and 180(60%) from Multan Sadar. The majority of the population was not fully satisfied with the services provided by the basic health units and was unable to gain the entire facilities adequately. Most importantly, the long distance of basic health units from residing areas, low quality and shortage of medicine were the basic reasons affecting the performance of basic health units.

Conclusion: The majority of the population was not fully satisfied with the services provided by basic health units.

Keywords: Basic health unit, Health care system, Performance. (JPMA 66: 1632; 2016)

Introduction

Improved health plays a key role in human's personal, familial and societal development. A healthy person also has a sturdy clutch in role performance in accord to status. Health is the basic ingredient of victory in any society. There are various social, economic, biological and environmental factors which directly or indirectly affect the health of individuals in a society. Better health is also the basic right of every individual of a society to enjoy a victorious life.[1] However, in most of the societies, human rights are not well recognised. Perhaps it is because it is a modern phenomenon which has been originated from the western world. At present, human rights are considered universal, and better health is also considered the compass of human rights.[2] In 1946, the World Health Organisation (WHO) made a first articulation in its constitution to conquer the best possible standard of health as a right of every individual. To promulgate those standards, the WHO and United Nations International Children's Emergency Fund (UNICEF) affirmed many declarations.[3]

The government of Pakistan has also taken initiatives to meet the objectives of "Health for All" and joined hands with the WHO, UNICEF, World Bank and other international donor agencies to ensure the provision of various preventive, curative and rehabilitative services. Despite that the state, local governments and donor agencies were involved to promote the family planning programme, the improvement was very sluggish. The major causes of morbidity and mortality in Pakistan are communicable diseases like tuberculosis (TB), respiratory tract infections (RTIs), tetanus and diarrheal diseases. However, through expanded programmes on immunisation (EPI), the country is trying to overcome these diseases by proper neonatal vaccination.[4,5] In Pakistan, basic health units (BHUs) are the fundamental and key components in health system for the provision of primary health care (PHC). Therefore, it is important to study whether BHUs are properly supporting to communicate and engage patients and to promote health.

Most of the literature on health care acknowledged that the PHC is essential to achieve social goals. Therefore, a number of studies have elaborated that to meet the PHC objectives, it is necessary to control diseases which are major causes of infants and maternal deaths. Thus in order to adopt this rationale, the system of EPI was introduced. Before this programme, only those children got proper vaccination who were living near a health facility. But this programme assures the provision of vaccination from door to door by specialised outreach health workers in their respective catchments.[6]

Some studies used the correlation analysis to examine the

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access to the regular check-up from the doctor and the primary care. The results highlighted that those people who have easy access to the source of health facilities were habitual to obtain primary care. The findings of those researches proclaimed that the healthier doctor-patient relationship and the provision of medical health facilities on the doorstep can support the primary care.[7]

However, a few studies have argued that some communicable diseases, infant mortality rate (IMR) and maternal mortality rates (MMR) are continuously increasing around the world. Most affected regions are underdeveloped and under-developing regions of Asia, Latin America and Africa, and the existing health systems could not perform adequately in those regions. Therefore, it has become compulsory to launch an up-to-date health system to ensure healthy lifestyle in developing regions.[8]

Literature also showed that the deprived and depressed people are more prone to diseases. Prenatal depression among the mothers in particular may lead the infants towards any disability, malnutrition, diarrhoea and weak immunisation system.[5,9]

It has been observed that the assisting staff of medical officers, physician assistants (PAs) or nurse practitioners (NPs) at health centres should be well trained and practise in PHC because they mostly experience routine treatment, i.e. minor emergencies and chronic and acute diseases. Therefore, the patients are more satisfied with assisting staff treatment than the medical officers because assisting staff spends more time with the patients during their treatment process and provides more care to them at all stages.[10]

In underdeveloped countries, the patient's requirements are higher than the provided resources. That is why the private sector dominates the health system of the underdeveloped states, particularly in the provision of primary health care. Developing countries have to struggle hard in order to meet the needs of the people for the primary health care. Many countries have exemplified that the delivery of primary health care is possible and could be improved by partnership of the non-governmental organisations.[11]

Previous studies have highlighted that mortality and morbidity is due to health destructive activities such as excessive use of tobacco, drinking, unhygienic food and bodily idleness. However, these can be controlled with the execution of chronic care model in PHC performance. Adequate care delivery system will be more appropriate to prevent diseases.[12]

Insensitive and incompetent healthcare system is an absolutely normal phenomenon in developing countries as they have to struggle hard to fulfil the requirements of patients and to improve PHC provision. Private medical facilities are also dominating over the government medical facilities because of much better health facilities.[13]

It is elaborated that for the development of society, human betterment is crucial which is only possible by concentrating on better education facilities, improved health services, access to safe drinking water and improved sanitation.

In Pakistan, it is necessary to raise the share of health and education expenditures. Education was not given more than 2% and health was given 0.23% of gross domestic product (GDP) which is very low to achieve Millennium Development Goals (MDGs) till 2015, established in 2000. There is a need to concentrate on human development because a sustainable development is impossible to achieve without better health and education.[14] The current study was planned to explore the important determinants of primary health care which can improve the performance of BHUs in South Punjab.

Subjects and Methods

This cross-sectional study was conducted in October 2014 in three tehsils of district Multan in southern Punjab, Pakistan, and comprised PHC recipients. To select a district from a universe of 11 districts, multi-stage sampling technique was used apart from examining the performance of BHUs.

In the first stage, Multan was selected using simple random sampling technique out of 11 districts, i.e. Bahawalpur, Bahawalnagar, Lodhran, Multan, Khanewal, Vehari, Dera Ghazi Khan, Rahim Yar Khan, Muzzafar Garh, Rajan Pur and Layyah. In the second Stage, the rural areas of tehsil Jalalpur Pirwala, Shujabad and Multan Sadar were selected from within district Multan, sparing the Multan city by using purposive sampling technique. Furthermore, we selected the catchments of BHUs by choosing every fourth BHU by adopting systematic random sampling and the law of large numbers (LLN).

The current study focused on married people because only they were more likely to avail of all sorts of PHC services, like mother and child care, all kinds of immunisation, family planning and general healthcare, etc.

The general hypothesis of the study was: the higher the performance of healthcare system, the higher will be the PHC level. The null hypothesis was: there is no association between BHU visit whenever you get ill and ever get the

maternal facilities from BHU staff. The alternate hypothesis was: there is association between BHU visit whenever you get ill and ever get the maternal facilities from BHU staff.

Frequency distribution with percentages was calculated to tabulate the surveyed data. Chi-square method was applied to examine the hypothesis. SPSS 16 was used for data analysis.

Results

Of the 77 BHUs in the three selected tehsils, 19(24.7%) were selected for this study. Of them, 4(23.5%) were located in Jalalpur Pirwala, 3(17.6%) in Shujabad and 12(70.6%) in Multan Sadar. Besides, of the 300 respondents interviewed from the BHUs, 72(24%) were from Jalalpur Pirwala (18 from each BHU), 48(16%) from Shujabad (16 from each BHU) and 180(60%) from Multan Sadar (15 from each BHU) (Table-1).

Of all the participants, 227(75.7%) were women and 73(24.3%) were men. Moreover, 4(1.3%) of the respondents were aged below 18 years, 84(28%) between 18-27 years, 124(41.4%) between 28-37 years and 88(29.3%) were aged above 37 years. Monthly income of 145(45.3%) respondents was below Rs5,000 while 115(38.3%) had a monthly income between Rs5,000 and Rs10,000. Besides, 4(1.3%) participants had diabetes, 24(8%) high blood pressure, 10(3.3%) TB, 56(18.7%) anaemia, 50(16.7%) RTIs, 39(13%) skin problems and 117(39%) had other diseases.

Furthermore, 231(88.5%) respondents said that the public medical health facility was available near to their home and 30(11.5%) said that the private medical health facility was available near to their home. Besides, 61(20.3%) respondents preferred private medical health facility during illness while 239(79.7%) preferred public medical health facility. Also, 72(24%) respondents said the distance of BHU was less than 1km from their home while 216(72%) said the distance was 1-6km. When asked whether there were any community meetings with the BHUs' staff, 161(53.7%) respondents replied in

Table-1: Tehsil Wise Distribution of Respondents.

Tehsils	Total BHUs	Selected BHUs	Respondents from each BHU	Total Respondents from Selected BHUs
JalalPur Pir Wala	16	4	18	72
Shuja Abad	13	3	16	48
Multan Sadar	48	12	15	180
Total	77	19	-	300

BHU: Basic Health Unit.

Table-2: Summary of Surveyed Data.

2 (a): Demographic Summary of the Respondents

Percentage Distribution With Respect to Gender		
Gender	**Frequency**	**Per cent**
Male	73	24.3
Female	227	75.7
Percentage Distribution With Respect to Age in years		
Less than 18	4	1.3
18-27	84	28.0
28-37	124	41.4
More than 37	88	29.3
Percentage Distribution With Respect to Qualification		
Illiterate	105	35.0
Primary	58	19.3
Middle	30	10.0
Metric	63	21.0
Above	44	14.7
Percentage Distribution With Respect to Monthly Income (in Pak Rupees)		
Less than 5000	145	48.3
5000-10000	115	38.3
More than 10000	40	13.3

2 (b): Distribution of the Respondents With Respect to Health Status

Percentage Distribution With Respect to Illness		
Seldom	101	33.7
Often	185	61.7
Most Often	14	4.6
Percentage Distribution With Respect to Disease		
Diabetes	4	1.3
Blood Pressure	24	8.0
Tuberculosis	10	3.3
Anaemia	56	18.7
Respiratory Tract Infection (RTI)	50	16.7
Skin Problems	39	13.0
Other	117	39.0
Percentage Distribution of Respondents Suffering from Chronic Disease		
Diabetes	6	10.0
Blood Pressure	20	33.3
Tuberculosis	16	26.7
Other	18	30.0

2 (c): Distribution of Respondents According to Available Health Facilities

Percentage Distribution With Respect to the Health Facility		
Public Medical Health Facility	231	88.5
Private Medical Health Facility	30	11.5
Percentage Distribution With Respect to Medical Facility Preferred to Visit during Illness		
Public Medical Health Facility	239	79.7
Private Medical Health Facility	61	20.3
Percentage Distribution of the Respondents regarding their Visit to BHU Whenever They Get Ill		
Most often	69	23.0
Often	194	64.7

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Seldom	37	12.3
Percentage Distribution of the Respondents regarding Distance of BHU from their Home		
Less than 1 Km	72	24.0
1-6 Km	216	72.0
Percentage Distribution of the Respondents regarding their Often Examining person at BHU		
Medical officer	76	25.3
Medical Technician	66	22.0
Dispenser	38	12.7
L.H.V.	120	40.0
2(d): Distribution of Respondents Benefited from Health Awareness Programmes		
Percentage Distribution of the Respondents regarding Community Meetings held by the BHU staff		
Yes	161	53.7
No	139	46.3
Percentage Distribution of the Respondents regarding Provided Health Care Information from BHU staff		
Yes	177	59.0
No	123	41.0
Percentage Distribution of the Respondents regarding act Upon Health Care Information Provided by the BHU staff		
To great extent	57	19.0
To some extent	115	38.3
Not at all	128	42.7
2 (e): Satisfaction of Respondents Regarding Medical Facilities at BHUs		
Percentage Distribution of the Respondents Regarding to satisfaction Level about BHU		
To great extent	126	42
To some extent	171	57
Not at all	3	1
Percentage Distribution of the Respondents regarding Attitude of BHU Staff is Satisfactory		
To great extent	175	58.3
To some extent	113	37.7
Not at all	12	4.0

Source: Calculations based on survey data
BHU: Basic health unit
LHV: Lady health visitor.

the affirmative while 139(46.3%) in the negative. Moreover, 177(59%) respondents said they were provided with the health care information by the BHU staff while 123(41%) said they were provided with the information (Table-2).

As for hypothesis testing, the relationship between the performance of the healthcare system and the PHC level showed significant results (Table-3). As such, the alternate hypothesis statement was taken as true, meaning that higher the performance of healthcare system, the higher the PHC level.

Table-3: Hypothesis Testing.

Visit BHU Whenever you get Ill	Ever get the Maternal Facilities from BHU Staff Yes	No	Total
Most often	63	12	75
Often	128	61	189
Seldom	23	13	36
Total	214	86	300
Degree of Freedom = 2			
Level of significance = 0.018			
Chi-square value = 8.064 ***			

BHU: Basic health unit
Note: (***) shows the rejection of Null hypothesis at 1% level of significance.

Discussion

Throughout Pakistan, especially in Southern Punjab, the health infrastructure is under developed. The basic health units in rural areas are not well-equipped. The results of this study show that the rural population of Southern Punjab is at lowest ebb in terms of primary and tertiary health care.[15] In Pakistan, the provision of quality health care has never been a priority area for the planners or policy makers. To improve the standards of health services, World Health Organization recommends to allocate 6 percent of the GDP for health sector. However, the total expenditure on health is about 2.4 percent of GDP, of which private expenditure constitutes 83.6 percent.[16] Public health expenditure was 0.9 percent of GDP in 2014-15 which is a clear reflection of poor political commitment towards healthcare. Moreover, the expenditure on provision of health services in Pakistan is the lowest in South Asia.[17]

Low budgetary allocations for health sector is the root-cause of the failure of the government in achieving its health goals. Being a developing country, rural areas of Pakistan are still facing health problems due to certain socio-economic barriers. Gender inequality and discrimination, poverty, illiteracy, poor infrastructure and transportation are the leading hindrances in the way to progress of the health sector. Nevertheless, in Pakistan rural females are playing an important role in the socio-economic matters of their family in spite of the fact that it is a male dominant society. The current study asserts that -75.7% females -visited BHUs for medical -treatment - The reason was seeking health support for their children or themselves. T his depicts that males are not so concerned about their family health care as they do not prefer to visit BHUs with their family members.

The current study pinpoints that poor and uneducated people go to BHUs while literate/highly qualified and rich people are not interested in getting services from the

BHUs. The results also manifest that mostly respondents who visited BHUs were illiterate, primary, middle or matric (secondary school) qualified while few of the respondents'(i.e. 14.7%) education level was above matriculation. - Similarly, the income of the majority respondents (i.e. 48.3%) was less than 5,000 PKR (Pakistan Rupee) per month, whereas the - the higher income groups - preferred - private medical facilities. The study potrayed that only 25 percent of the respondents were utilizing the services of the BHUs apparently due to poor services available.

According to the results, majority (i.e. 79.7%) of the respondents visited nearby BHUs which - shows that distance also matters in health seeking behaviour. Majority (i.e. 72.0%) - stated that the distance from their abodes to BHU was between 1 to 6 kilometers and - which was -- difficult to travel - in the absence of any transport. Although, -saved money, but at the same time it was - a great hurdle in reaching - BHUs for treatment.

Our study results show that only- 25.3% of the respondents were examined by the medical officer. The remaining -were seen - by a medical technician, dispenser or a lady health supervisor. A large number of the respondents (- 53.7%) - attended community meetings held by the BHU staff and - subsequently got - - health care information.- -Despite half of the respondents being satisfied with the BHU services, most did not follow the health care information. With a large number of people falling ill with Respiratory Tract Infections, skin diseases and Gastrointestinal disorders, just goes to prove that the education conveyed was not followed.

Conclusion

The majority of the population was not fully satisfied with the services provided by the BHUs and they were not getting full range of facilities adequately. Proper monitoring system should be maintained for the better supervision of the staff and check and balance of available medicine stock. There is also need to ensure the quality of medicine available at BHUs.

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