# ORIGINAL ARTICLE FACTORS INFLUENCING HEALTHCARE SEEKING BEHAVIOUR AT PRIMARY HEALTHCARE LEVEL, IN PAKISTAN

### Rizwana Hussain, Arash Rashidian, Assad Hafeez\*\*, Negar Mirzaee\*

Department of Health Policy and Management, \*Department of Health Economic, School of Public Health, Tehran University of Medical Science-Iran, \*\*Department of Research & Development, Health Services Academy, Islamabad-Pakistan

Background: The objective of this study is to explore the factors which influence the health seeking behaviour and utilization of healthcare services of the community in context of geographical, socio-demographic, cultural, economic and educational background. Methods: A community based cross-sectional survey was performed on 900 households in five districts of Punjab from 1<sup>st</sup> February to 2<sup>nd</sup> March, 2016. In each of the selected district random sampling method was used for selection of six primary health facilities. Nine hundred household purposively selected around each selected PHCF in opposite direction at distance of 5, 10, 15 km. A pretested questionnaire, WHO operational package (for assessing, monitoring and evaluating country pharmaceutical situations Level IIb) was acquired, and analysed by SPSS 23. Results: In 900 households visited, total population was 5024, out of which females and males were 47.7% and 52.3% respectively. About 95% of community had source of income. The male respondents and females were 95% and 5% respectively. 43.3% of patients visited PHCF, were with the serious complaints. 37% patients in households didn't take medicines when got sick. Females who completed their primary education were same in number as male but after primary education, males were more who perused further education. For 14% of the respondents, PHC was too far and for 61.9% of the respondents, PHC was close to reach.74.5% of the respondents were not satisfied with timings. 42.7% got medicines they need from PHC. Community with access <15 min to PHCF were 57.2%, and  $\geq 1$  hour was 5%. 49.1% of respondents could get free medicines from PHC. 64.4% respondent found medicines expensive at private pharmacies. In 53.3% of the cases, prescriber was doctor and for 47.6% were trained health assistant. Conclusion: There is a potential to improve the health seeking behaviour and PHC utilization by addressing the demandside (community) factors created by geographical access, socio-economic factors, level of education, cultural beliefs and by healthcare system itself. Male dominance was found. Level of education was more among males. Physical access was a significant barrier. Availability of medicines was low. There was absence of doctor at PHCF.

Keywords: Health seeking behaviour; Primary healthcare; Barriers

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## INTRODUCTION

Utilization of the healthcare services and its effects on population are directly related to the health seeking behaviour of the community.<sup>1</sup> Pakistan need incorporated actions gearing the health systems, in the light of innovative evidence-based policies and diverse health system research.<sup>2</sup> Facts suggest that demand-side barriers may be as significant as provider-side, in demoralizing the community from acquiring medication. Hitherto comparatively slight consideration is shown, by policy makers or researchers, in approach to reduce their outcomes. These factors are prone to be significant for the under privileged and at-risk community (elderly, women, children etc.)<sup>3</sup>, and studies showed that they are least advantaged from public health spending<sup>4</sup>.

Factors that define the healthcare seeking behaviour may be geographical, social, cultural,

demographical or political<sup>3,5</sup>, and hold them from getting benefit by utilizing public healthcare<sup>3</sup>.

Certainly, the use of healthcare services may be influenced/determined by knowledge and information, financial aspects and social norms. Other dynamics embrace conservational conditions, social and demographic aspects, awareness about the use of health services, gender issues, governmental situation, and the healthcare organization itself.<sup>6,7</sup>

A vital contributing fact for healthcare seeking behaviour is the body of the healthcare organization.<sup>1</sup> In healthcare system of low-income countries like Pakistan, lack of education, scarcity of resources and finance in the health segment, insufficient water and inadequate hygiene level has an immense effect on health indicators. In addition, direct and indirect cost of facilities, lack of awareness on sickness and health, and social and cultural beliefs are obstacles to the delivery of healthcare.<sup>8</sup>

These challenges, which are substantial in Pakistan health care organization, influence negatively the health seeking behaviour of people. Community has different choices to acquire services from the different types of healthcare providers. It is comprising of aspects related to prospective healthcare providers (like service quality and specialty) and aspects associated to the patients themselves (like age, sex, literacy financial status, and income).<sup>9</sup> These characteristics can influence the healthcare seeking behaviour even though of healthcare services do present for the public.

Regardless of presence of various healthcare providers' people especially low-income class avail public healthcare system which is for free.<sup>10</sup> Health experts always inspire people to avail healthcare system with qualified personnel in medical field and condemned self-medication and traditional therapists although they are considered under the health care system.<sup>11</sup>

The low-income class and aging people, who are mainly concentrated in rural regions are the mostly influenced by scarce resources in health organization.<sup>10</sup>

Availability of healthcare services is better in cities therefore rural areas lack advanced healthcare. Although they are already exposed to poor sanitation and have low income, utmost at risk, who require health care services at the maximum. Under-utilization of the public healthcare is due to non-use of health facilities leads to detrimental health activities such as patients visit traditional healers or don't take any kind of treatment leaving negative effects on their health status.<sup>12</sup>

The Government Punjab, Department of has network of healthcare facilities, Health dispensaries, health houses, maternity homes, traditional healers, private hospitals and pharmacies throughout the country in recent years. However, there are still discrepancies in distribution and physical locality of health facilities between urban and rural regions; therefore certain people have more access to health services than others. The lack of public facilities in some communities, which are predominantly used by the poor, is likely to affect the health seeking practices of the population. This problem of inequity in health facility distribution affects the health seeking practices of several communities hence hindering health services utilization.

Most studies on health seeking behaviour have been disease specific therefore; limited knowledge is available on general health seeking practices of communities including problems faced in pursuit of health services. The purpose of the study was to assess the health seeking practices and challenges in utilizing health facilities in a rural community.

## MATERIAL AND METHODS

A community based cross-sectional study was conducted from 1st February to 2nd March 2016 in five districts (Rawalpindi, Gujranwala, Rajanpur, Muzaffargarh, Bahawalnagar) of Punjab, Pakistan. There are four provinces of Pakistan; Baluchistan, Khyber Pakhtunkhwa, Punjab, and Sindh. The districts in provinces are divided into low, medium and high, according to Quantifying sub-national human development indices from household survey data, 2016.<sup>13</sup> One district was selected among each category of HDI districts of Punjab, and two were randomly selected. A sample size of 900 households was taken in accordance to World Health Organization's (WHO) Operational Package for Assessing, Monitoring and Evaluating Country Pharmaceutical Situations IIb.

Data was entered and analysed by SPSS 23. Household head (executive decision maker, earner, and/or most active health care decision maker of individuals living under one roof) was taken as survey respondent. Households were selected within the districts at the distance of <5 km, 5-10 km, and >15 km in opposite clusters from the respective PHCF. In every third household from the two clusters in opposite directions around health facility, information was gathered from the respondent who was head of the family, main decision maker and earner of the household, and willing to respond to the questionnaire after the verbal consent. But after marking yes in consent box data collector started filling questionnaire.

The sample consisted of 30 households per PHC facility. These households were selected at the distance of <5 km, 5–10 km, and >15 km from PHC facility. Every third household around a PHC facility, at the respective distance, was selected in opposite directions. It is imperative to choose community of households, which are rationally illustrative of the geographic regions considered. Table-1, lists the five districts with their HDI level in Punjab.

Questionnaire was translated in local language and the back translated into English and then was given to healthcare management professional to give suggestions. And was piloted to check face, content and construct validity. For Reliability, its internal consistency was checked by piloting the study on 3 Primary healthcare facilities, in a one-week period. Cronbach's alpha was computed and found to be 0.75 for households. Five trained health workers collected data from households. With the services of lady health visitors from the nearest PHC facility, heads of households were approached by and introduced to information collector.

Data was checked at the end of each day to ensure quality control. It was entered and analysed in SPSS-23.

# RESULTS

In 900 households visited, total population was 5024, out of which females and males were 47.7% and 52.3% respectively. 95% of the respondents were with source of income. 29% were involved in agricultural work and 19% were non agricultural labourer, 19.7% were self-employed or owned their business. 95% of the respondents were male and female respondents were only 5% as shown in figure-1 below. Females who completed their primary education were same in number as male but after primary education, male were more who perused further education. 17% visited PHC level with nonserious complaints, 39.3% with somewhat serious complaints, and 43.3% with the serious complaints. Patients knowledge about use of medicines was 92.2%. Adherence of patients to medicines were 37%. In 28% of cases, family member advised not to take medicines. In 28% cases someone out of family advised that medicines are not needed. 14% of the cases respondent stated that PHCF was too far. In 21% of cases no one from the family got time to get medicines. 0.1%, of community share medicines with family/friends, 3.1% got medicines from public hospitals, 3.4% took medicines from the PHCF, 1.8% from the traditional healers and 81.4% bought medicines from private pharmacy, and 26.8% from the drug seller (without license).

61.9% of respondents opinioned that PHCF closest to their houses was easy to reach.74.5% of respondents agreed that they would use public health care facilities more if the opening hours were convenient. 42.7% of respondents opinioned that primary healthcare facility closest to their household usually has the medicines they need while 73.6% of the respondents living closest to private pharmacy opinioned that it had the required medicines. Geographical accessibility less than one hour was 56.7% and more than one hour was 43%. 42.8% of respondents agreed that medicines were usually available at PHCF, as in table.

Community with access less than 15 min to PHCF was 57.2%, between 15 min to 1 hour was 37.8% and more than 1 hour was by 5%. Travelling time to PHCF or any other healthcare facility was less than 15 min for 22.5% and 15 min to 1 hour for 70.1% and more than 1 hour for the 7.4% people as given below, and average tariff for one round trip for one person was 5–10% of daily wedge for the average low monthly income.

95.5% of the people had source of income. 49.1% of respondents who agreed that they could get free medicines at PHCF. 64.4% of the respondents who agreed that medicines were expensive at private pharmacies. 45.9% of the respondents who agreed that they could usually afford to buy the medicines they needed. 29.9% respondents who agreed that in the past they had to borrow money or sell things to pay for medicines. And in 37% of cases, household couldn't afford medicines.

39.8% belong to lowest income group, 51.8% belong to low income group, 5.3% belong to middle income group and just 3.1% to the high-income group as in figure-2.

In 53.3% of the cases, prescriber was doctor, 47.6% were trained health assistant or health aide. 3.3% dispenser were qualified pharmacist in their specialty. While 93.3% medicines were dispensed by the health assistant or pharmacy aide. Facilities that comply with the law (presence of a pharmacist/ pharmacy aide) were 93.3%. untrained staff was 3.3%. 6.5% took medicines from the PHC facilities and public hospitals. There were 14.8% of acute cases and patients with chronic diseases were 20.9% in the community. Healthy population were 58.8% and both chronic and acute cases were 5.6% among the community people as given in table-4.



Figure-1: Male and female respondents with age groups



Figure-2: Socioeconomic Status of the respondents (PAKISTAN DEMOGRAPHIC AND HEALTH SURVEY 2012-13) A: lowest<Rs. 15000, B: low Rs.15000–20000, C: middle Rs.20000–25000, D: Highest Rs. >25000

from districts of Rawalpindi, Bahawalnagar, Gujranwala, Muzaffargarh, and Rajanpur									
District name	HDI	Sub-national level HDI based on household survey in Punjab	Total no. of Primary healthcare facilities	Primary healthcare facilities Selected	Но	useholds sa	mpled		
					<5 km	5–10 km	>15 km		
Rawalpindi	0.646	Highest	108	6	10	10	10		
Bahawalnagar	0.478	Medium	82	6	10	10	10		
Gujranwala	0.604	Highest	97	6	10	10	10		
Muzaffar Garh	0.427	Low	84	6	10	10	10		
Rajanpur	0.425	Low	38	6	10	10	10		

# Table-1: Punjab districts on Human Development Index, PHC facilities including total households sampled from districts of Rawalpindi, Bahawalnagar, Guiranwala, Muzaffargarh, and Rajanpur

#### Table-2: Geographical accessibility of facilities in public health facility

Opinion	All	<5 km	5-10 km	>15 km	
Number of Respondent					
The PHCF Closest to households was easy to reach	Agree	61.9%	69.7%	21.7%	8.6%
My household would use public health care facilities more if opening hours were convenient.	Agree	75.4%	55.2%	27.5%	17.2%
The public health care facility closest to my household usually has the medicines we need.	Agree	42.7%	72.2%	23.1%	4.7%
The private pharmacy closest to my household usually has the medicines my household needs.	Agree	73.6%	58.4%	28.8%	12.8%

Table-5. Traver time to meanneare racintees							
	Primary Health Care Facility		Any Health Care Facility (Public Hospital)				
	Number of Households	%age	Number of Households	%age			
<15 Minutes	515	57.2	203	22.5			
15 Minutes – 1 Hour	340	37.8	631	70.1			
>1 Hour	45	5	66	7.4			

#### **Table-3: Travel Time to Healthcare Facilities**

### Table-4: Dispenser profile and compliance with the law and prescriber profile in the public sector

Professional dispenser during the visit	Public sector (%)			Private sector (%)	
Qualified Pharmacist	3.3			13.3	
Pharmacy Aide/Health Assistant	93.3			86.7	
Nurse		0		0	
Untrained Staff		3.3		0	
Prescriber profile in the public sector	Doctor (%)	Nurse (%)	Trained health worker/heal aide/ Health assistant (%)		
Professionals present during the visit	53.3	0	46.7		
Most senior professional present	53.3	0	0 46.7		
Most senior professional attended RDU-related training within the previous year	3.3	0	N. A		

## DISCUSSION

The head of households and decision maker of the families were mostly men. Although women in total number of people visited were almost equal in number as male. Male play a principal responsibility in deciding the healthcare requirements of a female as male are the head of household and a key decision maker for rest of the family especially for females in healthcare seeking at the time of the ill health.<sup>14</sup>

Male were more educated than females. Although regardless of the details that females are mostly the main caretaker of the members in the household, they have been destitute of the essential health awareness and healthcare.<sup>14</sup>

The participants were generally low earners based on their average monthly income, mostly engaged in agricultural field or self-employed and also most of them were from labourer class. Livelihood, income, family size, knowledge and education of the decision maker of the household determined healthcare utilization and health seeking behaviour in addition to age, sex and marital status.<sup>15–18</sup>

More than one quarter of the patients don't take medicines as per advice of a family member or a friend and in some cases wait for the symptoms to be relieved themselves. Cultural values of any society especially in rural areas habitually direct people to home therapy, self-care and seeking traditional treatment.<sup>15</sup> Suggestions from old women are always regarded and considered very important in the household.<sup>19</sup>

It influences the healthcare seeking behaviour by delaying the decision for acquiring treatment not only in the case of women but also in case of children's sickness.<sup>20–23</sup> Though societal customs and values are common apart from of age, social and economic position of the household and educational background.<sup>24–26</sup>

About half of the patients visit healthcare facility with less serious or somewhat serious reasons rest of them are actually serious. Besides this it influences the knowledge and detection of seriousness of sickness, sex, provision and satisfactoriness of healthcare facilities.<sup>27</sup>

Females in public hospital visit more as compared to men who visit private hospitals for their healthcare. Sex discrepancy has influenced the wellbeing of the females in Pakistan too.<sup>28</sup>

Maximum of the respondents had source of income but still belong to very low-income group and couldn't afford to buy medicines and at times need to borrow money for treatment. The financial divergence within the culture and short of social security measures in terms of scarcity of money make the underprivileged more at risk especially while paying for healthcare and selecting healthcare source.<sup>29,30</sup> Low income deprived community to get use of services in health facilities and also has negative impact on their health by making inappropriate decision at the time of need for healthcare. In south Asia region, in many countries it was found that community pay 80% out of pocket payment yearly for healthcare services.<sup>31</sup> Financial capacity to use healthcare facilities in Pakistan is same as people pay 76% out of pocket payment for the health expenses.<sup>23</sup>

High expenditure is indeed a key obstacle in healthcare utilization in Pakistan.<sup>33,34</sup>

Cost of visiting doctor and getting treatment is not only the barrier but the tariff paid for transport, for reaching to healthcare care facilities is also a hindrance which altogether cost in bulk. Therefore, family's financial status bound them to opt for healthcare facility to seek health services.<sup>8,35</sup>

Easy access to a PHC is anticipated as essential community right.<sup>36</sup> More than half of the participants found location of the PHC facility convenient for themselves but majority was not satisfied with the timings of the healthcare facility. More than three quarters stated that closest private pharmacy had all medicines they need.

Discontent with PHC facilities direct people to acquire medicines from the private pharmacies and drug stores<sup>37</sup> or to visit private hospitals or tertiary level hospitals to seek PHC<sup>38</sup>.

In low middle-income countries like Pakistan, travelling time and cost with scarcity of transport, scanty infrastructure all together influence the use of health facilities and add to raise expenditure of visit to healthcare facility.<sup>38–40</sup>

For about a little more than half of the patient PHC facility was in the access of less than one hour and for the others more than one hour. And they have to take public transport.

Accessibility of the transportation, geographical access to healthcare facility and travelling time to healthcare facility certainly effect the healthcare seeking and use of healthcare facilities.<sup>33,34,41</sup>

This geographical access for patient to reach healthcare facility is considered as a hindrance for patients and clients from the nearest health facility and has been considered as imperative hurdle to utilize healthcare facilities in rural areas.<sup>1</sup> Consequently, geographical access is parallel to the other aspects like presence of transport and travelling tariff.

In about half of the cases in PHC visited there was no doctor, prescriber was health assistant. and trained dispenser were just equal to none. Respondents who believe that they get medicines from the PHC facility were less than two quarters.

Public health services are underutilized in most countries of the developing world as compared to private healthcare. The reason behind is level of satisfaction gained due to effortless access, short waiting, extended opening timings, presence of staff and medicines, better environment and more privacy.<sup>42,43</sup>

In Pakistan, PHC facilities are not utilized properly due to limited awareness, inadequate medicines, and low educational level.<sup>1</sup> The nature of complaints presented by patient and duration of sickness account for the utilization, source and type of healthcare. If patient is presented with symptoms like fever, home remedies or traditional medicines are given, but if symptoms are many, severe and long-term treatment from physician is preferred.<sup>44,45</sup>

There is a potential to improve the health seeking behaviour and PHC utilization by addressing the demand-side barriers shaped by geographical access, socio-economic factors, level of education, cultural beliefs and by healthcare system itself and addressing them by healthcare strategies and plans which need information and facts about healthcare seeking behaviour for timely diagnosis, effectual management and apt involvement for implementation.

## CONCLUSION

There is a potential to improve the health seeking behaviour and PHCF utilization by addressing the demand-side factors produced by geographical access, socio-economic factors, level of education, cultural beliefs and by healthcare system itself. Pakistan need incorporated actions gearing the health systems, in the light of innovative evidence-based policies and diverse health system research.

## **AUTHORS' CONTRIBUTION**

Being my Supervisor Prof. Arash Rashidian like always guided me to frame my thoughts according to my research work for this paper. In the context of current healthcare system Prof. Assad Hafeez helped me in selection of the indicators. And I thanked my fellow for her valuable comments on the early sketch of this paper.

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## Address for Correspondence:

**Rizwana Hussain**, Dept. of Health Policy and Management, School of Public Health, Tehran University of Medical Science-Iran

Email: drrizh76@yahoo.com