DOI: https://doi.org/10.54393/pjhs.v4i05.406

PAKISTAN JOURNAL OF HEALTH SCIENCES
https://thejas.com.pk/index.php/pjhs
Volume 4, Issue 5 (May 2023)

Original Article

Assessment of Referral Patterns and Utilization of Basic Health Facilities in the Outpatient Department of a Tertiary Care Hospital: A Cross Sectional Study

Syed Ihtishaam Kakakhel[1], Humaira Mahmood[2], Jawaria Khan[2*], Gul Makey[3], Muhammad Arif[1], Sadaf Jamil[4], Farrukh Habib[5], Sher Afgan Raisani[6], Dure Yaqta Shaheen[7] and Farah Diba[2]

[1]Bacha Khan Medical Complex, Swabi, Pakistan
[2]Department of Public Health, Armed Forces Post Graduate Medical Institute, Rawalpindi, Pakistan
[3]Mardan Medical Complex, Mardan, Pakistan
[4]Centre for Disease Control, National Institute of Health, Islamabad, Pakistan
[5]Department of Public Health, Alhamd Islamic University, Islamabad, Pakistan
[6]TB control Program Balochistan, Pakistan
[7]National University of Medical Sciences, Rawalpindi, Pakistan

ARTICLE INFO

Key Words:
Referral, Primary Health Care, Government Facility, Chronic Illnesses

How to Cite:
Kakakhel, S. I. ., Mahmood, H. ., Khan, J. ., Makey, G. ., Arif, M. ., Jamil, S. ., Habib, F. ., Raisani, S. A. ., Shaheen, D. Y. ., & Diba, F. . (2023). Assessment of Referral Patterns and Utilization of Basic Health Facilities in the Outpatient Department of a Tertiary Care Hospital: A Cross Sectional Study : Referral Patterns and Utilization of Basic Health Facilities. Pakistan Journal of Health Sciences, 4(05). https://doi.org/10.54393/pjhs.v4i05.406

***Corresponding Author:**
Jawaria Khan
Department of Public Health, Armed Forces Post Graduate Medical Institute, Rawalpindi, Pakistan
javeriakhan084@gmail.com

Received Date: 28th November, 2022
Acceptance Date: 22nd May, 2023
Published Date: 31st May, 2023

ABSTRACT

The main reason behind poor healthcare delivery is malfunctioning of effective referral system. **Objective:** To determine the frequency of patients referred through proper channel in medical outpatient department of tertiary health care facility and to determine the causes of not utilizing basic health facilities by employing modified WHO questionnaire on Rapid Assessment of Referral Care System. A Cross-sectional descriptive study conducted in Medical Outpatient Department of Bacha Khan Medical Complex Swabi from 21st April to 21st September. **Methods:** Up to 400 participants going to medical outpatient department were selected through non-probability convenience sampling. Patient data like socio-demographic variables and questions with respect to referral was documented using a modified version of the Rapid Assessment of Referral Care System questionnaire from the World Health Organization. Percentages and frequencies were computed. **Results:** Amongst 400 participants who were included in the study, 244(61%) were female participants. About 365(91.3%) participants came to tertiary care hospital while (35)(8.8%) participants were referred. About 79(19.8%) participants were having chronic illness like Diabetes, hypertension, COPD, IHD, Asthma etc. 166(41.5%) participants choose this government facility due to presence of experienced doctors here in this facility. 159(39.8%) participants choose this facility due to presence of better care in this facility. Rest of them 75(18.7%) had other reasons. **Conclusions:** Most of the patients visited tertiary care hospital directly, with very minor health issues, not utilizing health facilities at the primary and secondary levels of care are overworked, which affects tertiary care facilities.

INTRODUCTION

When there is an efficient referral system and adequate use of primary healthcare facilities, a nation's health status will improve. Health is the basic right of every person, regardless of gender, social class, and religion. PHC's responsibility is to ensure that everyone has access to medical facilities within the means that are available. Yet, a positive number that takes into account the population's financial situation, accessibility to land, and degree of knowledge determines how often healthcare administrations are used [1]. In Pakistan, the primary health care structure is made of Basic Health Units BHUs (5000) and Rural Health Centers RHCs (600). Tehsil headquarter and district headquarter hospitals made secondary care. This includes 1st and 2nd referrals facilities providing acute, ambulatory, and inpatients facilities, and is supported by tertiary headquarter

DOI: https://doi.org/10.54393/pjhs.v4i05.406

hospitals [2]. For smooth functioning of the overall health system of the country, it must be ensured that primary health services are profited and there ought to be an effective referral if required in this way will diminish overburdening of tertiary health facilities. Healthcare services (HCS) and their impacts on the population are specifically related to the health-seeking deeds of the community [3]. Referral has been characterized a process where a healthcare worker at a base level of the healthcare framework, having rare assets (equipment's, drugs, aptitudes) to treat a clinical condition, looks for the assistance of a trained individual from a much better or highly improved facility at the same or higher level to assist in, or take over the charge of the patient's case [4]. Effective referral is when a referred patient comes to a referral health facility in an assigned time period in any case of the treatment result. Unsuccessful referrals are those who are referred but don't comply [5]. Studies conducted in Nigeria, Zimbabwe, and Namibia each reported that a majority of people accessed the hospital as their first source of care while only a small proportion (38%, 7%, and between 27%-52% individually) referred from a primary source of care [6]. A later study carried out in Tanzania uncovered that 75% of the admissions and 91% of patients at the referral site hospital came from inside a 10km range [7]. Essentially, a referral evaluation carried out in Ghana uncovers that as it were one out of thirty-four (3%) caretakers (who were met within the out-patient office at referral destinations) were referred, and among the patients conceded into the inpatient ward as it were 11% were referred [8]. An Indian study depicted more than 50% i.e., 55.7% of caretakers looked for care by specifically going to the referral facility with perception that the referral level healthcare facility gives way better quality benefits. In Uganda, a study detailed that as only half of the referred patients were able to get to the referral services on the same day of referral and there were no deaths among the 28% of the referred children whose guardian complied with the referral strategy as compared to 5% of deaths that were detailed among the children whose guardians did not comply with the referral [9]. According to local research carried out in Karachi, Pakistan, the LHWs had 55% referral rate, which is rather a high figure [10]. A review of the District Attock referral system revealed that 44% of the care-takers who visited higher level medical facilities and 75% of those who visited first-level referral facilities might have been effectively addressed at the primary medical facility [11]. Beside physical accessibility and distance, infrastructure and appropriate staffing are also critical to encourage utilization. Technical competence of available staff, staff Availability, and staff's attitude towards clients all influence service utilization at the primary and secondary healthcare level. A study from Guinea finds that specialized competence and ability of the healthcare staff, accessibility of administrations, interpersonal relationship between supplier and the patient and viability of healthcare faculty are vital determinants of utilization [12]. Another study conducted in Uganda looked into the factors that prevent people from using health facilities, including the lack of drugs, the perceived expense of care, and the unfriendly staff at primary and secondary healthcare clinics [13]. In developing countries insufficient staff accessibility at primary healthcare facilities due to lower staff numbers makes it difficult nearly incomprehensible for healthcare clinics to function on a 24-hour premise. As a result of this women despite of attended antenatal clinics end up resorting to seek help of traditional birth attendants [14]. Accessibility can be described in terms of availability of services, road state or distance to be travelled, transport costs to obtain service. Where access is good there is increase in utilization. Accessibility will for the most part result in tall utilization as watched in rural regions of Pakistan. Majority i.e., 93% of the respondents had utilized the given healthcare administrations since of the accessibility of distinctive health care centers [15].

METHODS

The Medical Outpatient Department of the Bacha Khan medical complex in Swabi, which serves as a referral center for other facilities, served as the setting for this cross-sectional survey to be conducted. Data were collected through modified version of WHO questionnaire on Rapid Assessment of Referral Care System. This study commenced after endorsement from the ethical board and research committee of Armed forces Post Graduate Medical Institute (Re: 210-AAA-ERC-AFPGMI) from 21st April to 21st September. The study was clarified to all patients and they were guaranteed that the study is absolutely done for data publication and research reason and informed written consent was taken." In this study, up to 400 participants going to medical OPD were computed from statistical equation n=z2pxq/e2 using prevalence of 50%. Patient data like socio-demographic variables and questions with respect to referral was recorded on an intentionally outlined questionnaire.

RESULT

There were 400 participants in the study, and 100% of them responded. Demographic characteristics of the respondents are listed in Table 1.

Table 1: Socio-demographic profile

Variables	Frequency (%)
Age	
18 to 28 years	142(35.5)
29 to 38 years	124(31)

DOI: https://doi.org/10.54393/pjhs.v4i05.406

Variables	Frequency (%)
Age	
39 to 48 years	64(16)
49 to 58 years	40(10)
59 to 68 years	24(6)
69 to 78 years	6(1.5)
79 and above	0(0)
Total	400(100)
Gender	
Male	156(39)
Female	244(61)
Total	400(100)
Marital status	
Married	283(70.8)
Unmarried	117(29.3)
Total	400(100)
Where do you live?	
Urban	92(23)
Rural	308(77)
Total	400(100)

Amongst 400 participants included in the study, (365) (91.3%) participants came to this facility directly and (35) (8.8%)Participant were referred.

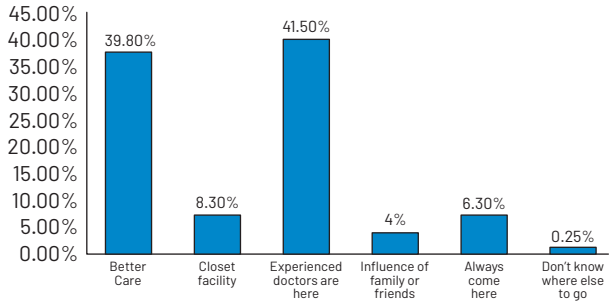

Figure 1: Selection criteria of choosing this facility

Amongst 400 participants included in the study, (166) (41.5%) participants choose this facility due to presence of experienced doctors here in this facility. (159) (39.8%) participants chose this facility due to presence of better care in this facility as depicted in figure 1. Nearly (255) (63.8%) people identified BHU/RHC as their closest government facility, and (337) (84.4%) of those people arrived there in under 30 minutes.

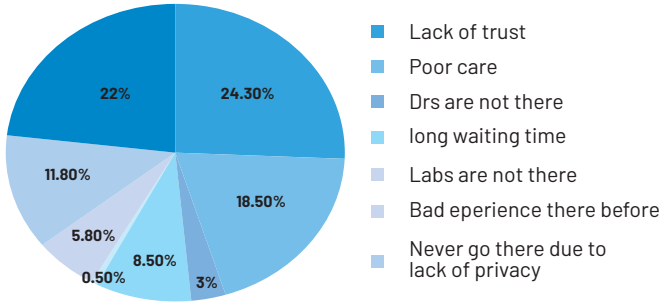

Figure 2: Reason for not choosing nearest facility

Amongst 400 participants included in the study, (97) (24.3%) participants didn't choose nearest facility due to lack of trust, (74)(18.5%) participants didn't choose nearest facility due to poor care, (47)(11.8%) participants never go there due to lack of privacy /fear. shown in figure-II.31 (7.8%) patients (of those referred) came from non-government facilities, while 4 (1%) patients received a referral slip. Transportation details are given in table 2.

Table 2: Details of transportation

Questions	Frequency (%)
How did you reach here?	
Bus/minibus/Wagon/coach/rickshaw	199(49.8)
Taxi/ Private car	56(14)
Motor Bike	140(35)
Others vehicle	5(1.3)
Total	400(100)
How long did it take you to reach here?	
within an hour	279(69.8)
More than an hour	121(30.3)
Total	400(100)
How were you able to gather this money?	
Easily	175(43.8)
With difficulty	225(56.3)
Total	400(100)
How much money you consumed to come here and returned to your home?	
500 to 1000 rupees	217(54.3)
More than 1000 rupees	183(45.8)
Total	400(100)

Amongst 400 participants included in the study majority used bus/minibus/wagon/coach/rickshaw to reach healthcare facility, most of the participants reached healthcare facility in an hour, nearly more than 50% of the participants gathered money with difficulty and most of them spent around 500 to 1000 rupees to reach health care facility.

DISCUSSION

The finding of this study revealed that 91.3% of the participants included in the study came to Tertiary Care Hospital directly in spite of the fact that 42.5% participants were having BHU as their nearest health facility to them, 21.3 % participants were having RHC as their nearest health facility. According to research conducted in Nigeria, 93% of participants had their first encounter with a teaching hospital as part of the National Health Framework [16]. According to another survey, the majority of patients arrive at hospitals directly without a referral or search for alternative sources of care [17]. Because the clinical and support services at the closest government facility were of inadequate quality, 77.7% of participants did not use them. The findings resemble those of a study done in Karachi at Agha Khan University Hospital, the study showed that the

DOI: https://doi.org/10.54393/pjhs.v4i05.406

high percentage of patients defer care at primary health facilities in favor of higher-level facilities because they are dissatisfied with the healthcare administrations provided at these facilities and because they need resources that are easily accessible [18]. Another study revealed that the most important factor affecting the consumption strategy was the quality of care provided and the staff's expertise at a first-level care office [19]. Regarding referral amongst 400 participants included in the study, 7.35 participants were referred from private clinic, and 1.0% participants were referred from government institution, while only 0.5% participants were referred due to influence of friends and family. 91.3% participants self-referred them and they do not know about referral slip and came directly to tertiary hospital ,7.8% participants were not given any referral slip while only 1.0% participants were given proper referral slip. Self-referral is quoted as one of the problems responsible for poor service of referral care [20].

CONCLUSIONS

Majority of patients visited tertiary care hospital directly, with very minor health issues which may have been treated at primary health facility and were not referred, thus resulting in overburdening of the tertiary care health facilitates resulting in depriving the deserving patients with serious health conditions in timely treatment and management. It also results in increase in the number of patients per doctor which often compromises on quality health care the serious needs of patients.

Authors Contribution

Conceptualization: HM, SIK
Methodology: HM, GM, SJ, SAR, FD
Formal analysis: MA, SJ
Writing-review and editing: JK, FH, DYS

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

Source of Funding

The authors received no financial support for the research, authorship and/or publication of this article.

REFERENCES

[1] Oyediran KA and Isiugo-Abanihe UC. Perceptions of Nigerian women on domestic violence: Evidence from 2003 Nigeria Demographic and Health Survey. African Journal of Reproductive Health. 2005 Aug: 38-53. doi: 10.2307/3583461.

[2] Panezai S, Ahmad MM, Saqib SE. Factors affecting access to primary health care services in Pakistan: a gender-based analysis. Development in practice. 2017 Aug; 27(6): 813-27. doi:10.1080/09614524.2017.1344188

[3] Shaikh BT and Hatcher J. Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers. Journal of Public Health. 2005 Mar; 27(1): 49-54. doi: 10.1093/pubmed/fdh207.

[4] MEASURE Evaluation. Referral System Assessment and Monitoring Toolkit. 2013. [Last Cited: 17th May 2023].Availableat:https://www.who.int/management/facility/rapidassessmentofreferralcaresystem.pdf

[5] Afsar HA, Qureshi AF, Younus M, Gulb A, Mahmood A. Factors affecting unsuccessful referral by the lady health workers in Karachi, Pakistan. Journal-Pakistan Medical Association. 2003 Nov; 53(11): 521-8.

[6] Abrahim O, Linnander E, Mohammed H, Fetene N, Bradley E. A patient-centered understanding of the referral system in Ethiopian primary health care units. PloS One. 2015 Oct; 10(10): e0139024. doi:10.1371/journal.pone.0139024.

[7] Font F, Quinto L, Masanja H, Nathan R, Ascaso C, Menendez C, *et al*. Paediatric referrals in rural Tanzania: The Kilombero District Study–a case series. BMC International Health and Human Rights. 2002 Dec; 2: 1-6. doi: 10.1186/1472-698X-2-4.

[8] BASICS II and the Ghana Health Service. The status of referrals in three districts in Ghana: Analysis of referral pathways for children under five. 2003. Available at: https://pdf.usaid.gov/pdf_docs/pnacw616.pdf.

[9] Kiwanuka SN, Ekirapa EK, Peterson S, Okui O, Rahman MH, Peters D, *et al*. Access to and utilisation of health services for the poor in Uganda: a systematic review of available evidence. Transactions of the Royal Society of Tropical Medicine and Hygiene. 2008 Nov; 102(11): 1067-74. doi: 10.1016/j.trstmh.2008.04.023.

[10] Afsar HA and Younus M. Patient referral at the grass-roots level in Pakistan. Nature and Science. 2004 Jan; 2: 18-27.

[11] Siddiqi S, Kielmann AA, Khan MS, Ali N, Ghaffar A, Sheikh U, *et al*. The effectiveness of patient referral in Pakistan. Health Policy and Planning. 2001 Jun; 16(2): 193-8. doi:10.1093/heapol/16.2.193.

[12] Haddad S, Fournier P, Machouf N, Yatara F. What does quality mean to lay people? Community perceptions of primary health care services in Guinea. Social Science & Medicine. 1998 Aug; 47(3): 381-94. doi:10.1016/s0277-9536(98)00075-6.

[13] Bakeera SK, Wamala SP, Galea S, Peterson S, Pariyo GW. Community perceptions and factors influencing

DOI: https://doi.org/10.54393/pjhs.v4i05.406

utilization of health services in Uganda. International Journal for Equity in Health. 2009 Dec; 8(1): 1-2. doi:10.1186/1475-9276-8-25.

[14] Babalola S and Fatusi A. Determinants of use of maternal health services in Nigeria-looking beyond individual and household factors. BMC Pregnancy and Childbirth. 2009 Dec; 9: 1-3. doi:10.1186/1471-2393-9-43.

[15] Khan N and Abbas M. Availability and utilization of primary health care services in the rural areas of district Peshawar-A case study. Sarhad Journal of Agriculture(Pakistan). 2007; 23(4): 1217-1123.

[16] Abodunrin OL, Akande TM, Osagbemi GK. Awareness and perception toward referral in health care: a study of adult residents in Ilorin, Nigeria. Annals of African Medicine. 2010 Jul; 9(3): 176-80. doi: 10.4103/1596-3519.68359.

[17] Furber AS. Referral to hospital in Nepal: 4 years' experience in one rural district. Tropical Doctor. 2002 Apr; 32(2): 75-8. doi: 10.1177/004947550203200205.

[18] Qureshi RN, Sultanali RS, Hoodbhoy Z, Bano R, Jabeen N. Referral pattern of emergencies in obstetrics: implications for defining scope of services and policy. Journal of the Pakistan Medical Association: JPMA. 2016 Dec; 66(12): 1606.

[19] Farahat T, Al-Kot M, Aldemerdash M. Current situation of the referral system in family practice in Shebein El-Koum District, Menoufia Governorate, Egypt. Menoufia Medical Journal. 2015 Apr; 28(2): 360. doi: 10.4103/1110-2098.163885.

[20] Eskandari M, Abbaszadeh A, Borhani F. Barriers of referral system to health care provision in rural societies in Iran. Journal of Caring Sciences. 2013 Sep; 2(3): 229. doi:10.5681/JCS.2013.028.