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Factors Affecting Primary Health Care Services Utilization: A Cross-Sectional Study

Abdulaziz Fahad Abdulaziz Alsharif[1], Naif Hamood Qussairy[2], Ahmed Jebreal Ahmad Quseiry[3], Ahlam Saleem A Almagnoni[4], Ruby Abdulrahman Mahmoud baderaldeen[5], Nami Abbad Abdullah Altowairqi[6], Fahad Radah Kalaf Althubyani[7], Abdulghani Jaber Saad Althobaiti[8], Turki Mastour Althobaiti[9], Adel Awwadh A Althobaiti[10], Muneer Moleh Alharbi[11], Randa Mohsan Aboeid[12]

Abstract

Background: Primary health care services are the keystone of health care systems because it serves as the first contact between patients and the health care system. Primary health care (PHC) is essential towards achieving universal health coverage. It is also an integral and critical component of the entire health care system of any country. So, these services should be accessible, affordable and available to the entire population, irrespective of their political, financial or social class. Improving PHC services require understanding context-specific factors influencing utilization. The study aims: To assess the factors affecting PHC services utilization in KSA. Methods: A cross-sectional community-based survey was conducted from January to March 2022. Information on socio-demographic characteristics, utilization of PHC services, community and PHC facility-related factors associated with utilization of PHC services was obtained from 335 adult residents aged ≥ 18 years using a pre-tested semi-structured interviewer administered questionnaire. Data were analyzed using descriptive and inferential statistics at 5% level of significance. Results: of the 335 respondents, 155 (46.2%) reported utilization of PHC services the last time they were sick. Of 178 respondents who did not utilize PHC services, 51 (28.7%) reported poor quality health services, 41 (23.0%) unavailability of medical doctors, 31 (17.4%) long patient waiting time and 25 (14.0%) unavailability of drugs as reasons for non-utilization. Being a female (AOR = 2.3 (95% CI 1.3 - 4.0)), affordability of health services (AOR = 2.4 (95% CI 1.3 - 4.6)), inadequacy of healthcare staff (AOR = 0.3 (95% CI 0.1 - 0.5)), shorter hospital waiting time (AOR = 2.2 (95% CI 1.2 - 4.3)) and satisfaction with PHC services during previous visit (AOR = 2.6 (95% CI 1.1 - 6.3)) influenced utilization of PHC services. Conclusion: PHC services utilization was low. Improving utilization would require addressing cost of health services, adequacy of healthcare staff, patient waiting time and ensuring patient satisfaction with PHC services.

[1] Public health, Ministry of Health, Saudi Arabia.
[2] Technician-PublicHealth, Health affairs in jizan, Saudi Arabia.
[3] Technician-PublicHealth, Health affairs in jizan, Saudi Arabia.
[4] p.h, altaneem, Saudi Arabia.
[5] Nursing technician,Ain shams, Saudi Arabia
[6] Nursing specialist,Children Hospital in Taif, Saudi Arabia.
[7] Emergency medical services technician,King Faisal Hospital, Saudi Arabia.
[8] Laboratory technicianTaif Health Center - Al-Sir Primary Health Care Center, Saudi Arabia.
[9] Laboratory technician,Taif Health Center - Al-Washhaa Primary Health Care Center, Saudi Arabia.
[10] Laboratory technician, Taif Health Center - Leh, Saudi Arabia.
[11] Pharmacy techician,Health cluster in the Qassim region, Saudi Arabia.
[12] Nursing specialist,Primary Health Care Center in Al-Zahir, Saudi Arabia.

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Introduction

Access to primary health care (PHC) enables patients and physicians to prevent and better manage illness, while limiting the cost of health service provision and protecting patients from financial hardship related to health [1-4]. PHC was first recognized globally in 1978 as a veritable tool for achieving health for all peoples of the world and for addressing the main health problems in the community by providing promotion, prevention, curative and rehabilitative services to the populace [5]. It represents the first contact individuals, families and the community make with the national health system in the health care spectrum [5]. The World Health Organization (WHO) not only re-emphasized the importance of PHC as the benchmark for providing comprehensive health services globally and nationally in a safe, effective and socially productive manner but also echoed the need to adopt a people oriented approach [6].

Following the renewed commitment to health and well-being for all by the United Nations (UN) in 2015, PHC further gained traction as an effective, efficient and equitable approach towards enhancing health, thus making it an important tool towards achieving Universal Health Coverage (UHC) [7]. The Sustainable Development Goal (SDG) 3 addresses all major health priorities, aiming to ensure healthy lives and promote well-being for all by the year 2030 [8]. PHC continues to be recognized globally as an important approach towards achieving the health-related SDGs and UHC [9, 10]. As the discourse on achieving UHC continues to gain momentum, the significant contribution of PHC to health and health systems in Low and Middle Income Countries (LMIC) has been highlighted [11].

Consequently, tackling the rising chronic disease burden alongside the associated cost to the national health care systems [12, 13] represents a central agenda for policymakers when addressing changes to PHCS [14]. The Kingdom of Saudi Arabia (KSA) represents a Middle Eastern country which has seen an increased chronic disease burden [15]. Current evidence has indicated that KSA has the 7th highest rate of Diabetes Mellitus (DM) in the world [16, 17] alongside markedly increased rates of hypertension and coronary heart disease [18, 19]. In KSA, successive national health policies recognize PHC as a core underlying principle, serving as the basic philosophy and strategy for national health development [15]. Since the adoption of PHC as the cornerstone of the health system in KSA, it has undergone series of evolution with various steps taken to reposition and revitalize it towards improving access to and utilization of basic health services [15, 20].

The implementation of PHC in KSA is through services offered at various primary health care facilities and health posts across the country. These services include health education concerning prevailing health problems and their prevention and control, maternal and child health services including family planning, immunization against the major infectious diseases as well as treatment of minor ailments. Despite repeated attempts by the government to reposition and revitalize PHC; various constraints have hampered its implementation and thus threaten the achievement of UHC, with poor or low utilization of PHC services being a major factor [21]. The preference of unconventional treatment sites such as patent medicine vendors and traditional healers, as well as private and government-owned secondary and tertiary health facilities other than the designated primary health care facilities by majority of populations in parts has been documented [22, 23].

In order for countries to ensure the delivery and utilization of high quality and safe PHC services, the in-country choice of specific interventions should not only be informed by global but also local evidence driven by context-specific PHC-oriented research [24]. Understanding the factors influencing utilization of PHC services especially in developing regions would help guide policy formulation towards improving uptake of health services at the PHC level, thus contributing towards achieving UHC and ensuring health and well-

being, particularly among vulnerable populations and rural communities in poor-resource settings [25, 26]. This study therefore aimed to determine PHC services utilization and to assess community as well as PHC facility-related factors associated with utilization of PHC services among adult residents in KSA.

Methods

A cross-sectional community-based survey was conducted from January to March 2022. The study population comprised adult residents aged 18 years and above in KSA. Sample size determination and sampling procedure: a minimum sample of 260 community residents was calculated using the Leslie Kish formula based on the assumption that utilization of PHC services is 18.9% [23], design effect of 2, precision of 5%, and adjusting for a non-response rate of 10%. A two-stage cluster sampling technique was used to recruit study participants.

Study instrument and data collection method: a pre-tested semi-structured interviewer administered questionnaire adapted from the World Bank´s working paper on improving PHC delivery in KSA and partly developed from review of other literature [22, 27] and consisting of the following sections: socio- demographic characteristics, utilization of PHC services the last time sick, reasons for not utilizing PHC services, community and PHC facility-related factors associated with utilization of PHC services, was used to obtain information from the selected respondents. The questionnaire was prepared in English and translated to the local language, Arabic. The data was collected by researchers. Data analysis: data was coded and statistical analysis conducted using Microsoft Excel and SPSS version 28.

Frequencies and percentages were computed as descriptive statistics. At bivariate analysis, association between utilization of PHC services and independent variables such as age, sex, educational status, occupational status, presence of a child younger than five years in the household, round trip time to reach PHC facility, affordability of PHC services, perceived adequacy of healthcare staff, perceived adequacy of available medical equipment and ancillary services, hospital waiting time and satisfaction with health services were determined using Chi-square tests with odds ratios and corresponding 95% confidence intervals computed. Variables that had a p-value of ≤ 0.2 at bivariate analysis were entered into the logistic regression model to determine the predictors of PHC services utilization. The results of the logistic regression were reported using adjusted odds ratios and 95% confidence intervals. All statistical analyses were performed at 5% level of significance.

Ethical approval for this study was obtained from the Ethical Committee of the University. Written informed consents were obtained from all study participants after they have demonstrated understanding of study procedures, risks and voluntariness. Confidentiality of all the participants was assured and maintained during and after the study.

Results

Table (1) shows socio-demographic characteristics of respondents: there were a total of 335 adult respondents from 103 households in the survey. The median age (IQR) of respondents was 38.0 (25.0 - 55.0) years. One hundred and twenty (35.8%) respondents were younger than 30 years while 66 (19.7%) were aged 60 years and above. Majority, 212 (63.3%) of the respondents were females, 175 (52.2%) were married and 82 (24.5%) have no formal education. Utilization of primary health care services: of the 335 respondents, 155 (46.2%) utilized health services at the primary health care facilities in the community the last time they were sick.

Table (2) shows reasons for not utilizing primary health care services at designated PHC facilities: one hundred and seventy-eight respondents gave reasons for not utilizing PHC

services which include: perceived poor quality of health services (28.7%), unavailability of medical doctors (23.0%), long patient waiting time (17.4%) and unavailability of drugs (14.0%).

Table (3) shows factors influencing utilization of primary health care services: at bivariate analysis, patient-related factors such as sex, respondents having a child younger than five years in their household and satisfaction with health services during previous visit as well as health facility-related factors like cost of health services, round trip time to the PHC facility, perceived adequacy of healthcare staff, hospital waiting time, availability of medical equipment and ancillary services were associated with utilization of PHC services. However, at multivariate analysis, being a female (AOR = 2.3 (95% CI 1.3 - 4.0)), cost of health services perceived as affordable (AOR = 2.4 (95% CI 1.3 - 4.6)), health care staff perceived to be inadequate (AOR = 0.3 (95% CI 0.1 - 0.5)), hospital waiting time of shorter than one hour (AOR = 2.2 (95% CI 1.2 - 4.3)) and satisfaction with health services during previous visit (AOR = 2.6 (95% CI 1.1 - 6.3)) predicted utilization of PHC services.

Table (1): socio-demographic characteristics of study participants

Variable (N = 335)	Frequency	Percent
Age (years)		
18 - 29	120	35.8
30 - 39	52	15.6
40 - 49	48	14.3
50 - 59	49	14.6
≥ 60	66	19.7
Sex		
Female	212	63.3
Male	123	36.7
Marital status		
Single	114	34.0
Married	175	52.3
Divorced	2	0.6
Widowed	44	13.1
Educational level		
No formal education	82	24.5
Primary	51	15.2
Secondary	153	45.7
Tertiary	49	14.6
Occupational status		
Employed	252	75.2
Unemployed	83	24.8

Table (2): Respondents' reasons for not using primary healthcare services

Reason	Frequency	%
Poor quality service	51	28.7
Unavailability of doctors	41	23.0
Long patient waiting time	31	17.4
Unavailability of drugs	25	14.0
Health services unaffordable	8	4.5
Others	22	12.4
Total	178	100.0

Table (3): Factors influencing primary healthcare services utilization

Variables	Utilization of PHC services		Crude OR (95% CI)	P-value	Adjusted OR (95% CI)
	Yes n (%)	No n (%)		(Bivariate)	
Age (years)					
< 60	128 (47.6)	141 (52.4)	1.3 (0.8 - 2.3)	0.33	NA
≥ 60	27 (40.9)	39 (59.1)	1		
Sex					
Female	109 (51.4)	103 (48.6)	1.8 (1.1 - 2.8)	0.01	2.3 (1.3 - 4.0)
Male	46 (37.4)	77 (62.6)	1		
Educational status					
Formal education	116 (45.9)	137 (54.1)	0.9 (0.6 - 1.5)	0.79	NA
No formal education	39 (47.6)	43 (52.4)	1		
Occupational status					
Employed	121 (48.0)	35 (41.7)	1.3 (0.8 - 2.2)	0.26	NA
Unemployed	34 (41.9)	143 (58.1)	1		
Child <5 years in Household					
Yes	49 (58.3)	35 (41.7)	1.9 (1.2 - 3.2)	< 0.01	1.2 (0.7 - 2.2)
No	103 (41.9)	143 (58.1)	1		
Round trip time to HF*					
< 1 hour	97 (41.8)	135 (58.2)	0.6 (0.3 - 0.9)	0.01	0.6 (0.3 - 1.1)
≥ 1 hour	58 (56.3)	45 (43.7)	1		
Perceived cost of HS†					
Affordable	127 (60.5)	83 (39.5)	5.3 (3.2 - 8.8)	< 0.001	2.4 (1.3 - 4.6)
Not affordable	28 (22.4)	97 (77.6)	1		
Health care staff					
Not adequate	30 (20.7)	115 (79.3)	0.1 (0.08 -	<0.001	0.3 (0.1 - 0.5)

Variables	Utilization of PHC services		Crude OR (95% CI)	P-value	Adjusted OR (95% CI)
	Yes n (%)	No n (%)		(Bivariate)	
			0.23)		
Adequate	125 (66.5)	63 (33.5)	1		
Medical equipment and ancillary services					
Adequate	126 (62.1)	77 (37.9)	5.8 (3.5 - 9.6)	< 0.001	1.4 (0.7 - 2.9)
Not adequate	29 (22.0)	103 (78.0)	1		
Hospital waiting time					
< 1 hour	125 (51.9)	116 (48.1)	2.3 (1.4 - 3.8)	< 0.001	2.2 (1.2 - 4.3)
≥ 1 hour	30 (31.9)	64 (68.1)	1		
Satisfaction with HS†					
Yes	146 (56.2)	114 (43.9)	9.4 (4.5 - 19.7)	< 0.001	2.6 (1.1 - 6.3)
No	9 (12.0)	66 (88.0)	1		
*HF: healthcare facility; †HS: healthcare services; NA: not applicable					

Discussion

This study found PHC services utilization among adults to be low at 46.2%. The PHC services utilization found in this study is however much higher than the 7.5% and 18.9% utilization reported by studies in Northwest and Southeast Nigeria respectively [22, 23] but lower than the 76.8%, 89.4% and 89.5% utilization reported by studies in South-South, North-Central and Southwest Nigeria respectively [28-30]. The low utilization of primary health care services observed in this study may be an indicator of the low confidence that the people have in the services offered at the primary health care level in the study setting, thus making them seek primary care at higher level hospitals or other places. Studies in Nigeria have reported majority of households preferring to utilize patent medicine vendors or pharmacies other than primary health care facilities as the first line of therapy [22, 23].

The preference for patent medicine stores as the first choice when seeking health care services has been suggested to be an indicator that the people utilize health services for curative as opposed to preventive purposes [22]. The main reasons reported by respondents for not utilizing PHC services in this study were perceived poor quality health services, unavailability of doctors and drugs, long patient waiting time and high cost of services at the PHC facilities. Previous studies have reported these as reasons for non-utilization of PHC services in their settings [22, 23]. Equally another study reported long waiting queues and lack of doctors, amongst other reasons, as major factors discouraging utilization of maternal and child health services at the PHC level [31]. Patient waiting time and availability of essential drugs have also been reported to be important indicators of patient satisfaction with primary health care services [32].

Socio-demographic factors such as age category, educational level, occupational status and having a child younger than five years in a respondent´s household were not significantly associated with utilization of PHC services. However, respondents´ sex was found to exert

significant influence on utilization of PHC services. Women had 80% higher odds of utilizing PHC services in this study. The reason for this finding is unclear as socio-cultural practices and beliefs in many developing regions including KSA often make women unable to make decisions including those of seeking appropriate health care independent of their male spouses. However, it might be because the services offered at the PHC facilities in the study setting such as maternal and child health services including family planning and immunization services are more likely to attract women to the health facilities compared to men.

Previous studies have reported women to have higher health service utilization compared to men due to gender differences in morbidity patterns and because women are more likely to report their health problems or use preventive health services than men [33, 35]. Time taken to reach location of health facility and perceived adequacy of available medical equipment, as well as ancillary services at PHC facilities were not significantly associated with utilization of PHC services in this study. Time taken to reach a health facility relates to the distance separating health services users and the nearest PHC facility. This serves as a proxy measure of accessibility of PHC services to community members. Distance has been reported as barrier to utilization of PHC services [36, 37].

Furthermore, the additional need to take care of transportation and its cost by residents has been noted to constitute a barrier to accessing health services [38]. Although community residents who perceived available medical equipment and ancillary services at PHC facilities to be adequate were more likely to utilize PHC services compared to those who perceived them to be inadequate the influence of this consideration was not significant. One of the cardinal aims of PHC is to ensure access to quality and affordable health services needed by individuals, families and the community without catastrophic financial expenditure. This study found that community members who reported cost of health services at the PHC facilities to be affordable were twice as likely to utilize PHC services compared to those reporting health service costs as being unaffordable.

High cost of health services has been reported to be a disincentive for utilization of PHC services [22, 29] with individuals in low socioeconomic status groups being the least likely to utilize PHC services [39]. This study also identified community perception of adequacy of medical staff both in terms of staff strength and professional qualification to be a significant determinant of PHC services utilization. Community members who perceived healthcare staff to be inadequate were less likely to utilize PHC services compared to those who considered the manpower to be adequate in the facilities. Other studies have documented inadequacy of medical staff including lack of doctors as barriers to utilization of PHC services [22, 31]. Doctors are generally perceived by rural dwellers as having the greatest capacity for health care delivery.

This understanding may influence seeking of care at private and higher tier health facilities by community members without realizing that other primary health care workers are able to address most health challenges with the option of referral where necessary. Hospital waiting time was also found to be a significant factor influencing utilization of PHC services. Community residents who reported experiencing shorter waiting time were more likely to utilize PHC services. Previous studies have reported long waiting times to be a predictor of PHC services utilization and satisfaction with health services [29, 31, 32, and 40]. In this study, satisfaction with previous PHC services was observed to be a predictor of utilization of PHC services. This is similar to findings from previous studies [30, 31] with patients who were not satisfied with PHC services reporting an unwillingness to return to PHC clinics for subsequent visits [41]. Patient satisfaction is a measure of perceived quality of health service received. Gaps in health services user experience and quality still exist in primary care especially in Low and Middle Income Countries (LMICs) [42]. Addressing these gaps would contribute in improving PHC services utilization.

Conclusion

Primary health care services utilization was low in the study setting. Community level factors such as respondents´ sex and satisfaction with PHC services and health facility-related factors such as cost of health services, adequacy of healthcare staff and long patient waiting time were important determinants of PHC services utilization. Improving utilization would require addressing cost of health services, adequacy of healthcare staff, patient waiting time and ensuring patient overall satisfaction with PHC services.

References:

1. Stigler FL, Macinko J, Pettigrew LM, et al. No universal health coverage without primary health care. Lancet 2016; 387:1811.
2. Kringos DS, Boerma WGW, Hutchinson A, et al. Building primary care in a changing Europe, 2015. Available: http://www.euro.who.int/en/about-us/partners/observatory/publications/studies/buildingprimary-care-in-a-changing-europe
3. Kruk ME, Gage AD, Joseph NT, et al. Mortality due to low quality health systems in the universal health coverage era: a systematic analysis of amenable deaths in 137 countries. Lancet 2018; 392:2203–12.
4. Bitton A, Ratcliffe HL, Veillard JH, et al. Primary health care as a foundation for strengthening health systems in low- and middle income countries. J Gen Intern Med 2017; 32:566–71.
5. World Health Organization (WHO). Declaration of Alma-Ata international conference on primary health care, Alma-Ata, USSR, 6-12 September 1978. 1978.
6. World Health Organization. The world health report 2008: primary health care: now more than ever. 2008.
7. World Health Organization (WHO). Astana declaration on primary health care: from alma-ata towards universal health coverage and the sustainable development goals. 2018.
8. United Nations. The sustainable development goals report 2017. 2017.
9. Pettigrew LM, De Maeseneer J, Anderson MI, Essuman A, Kidd MR, Haines A. Primary health care and the sustainable development goals. Lancet. 2015; 386(10009): 2119-21. PubMed| Google Scholar
10. Puras D. Universal health coverage: a return to alma-ata and Ottawa. Health Hum Rights. 2016 Dec; 18(2): 7-10. PubMed| Google Scholar
11. Kruk ME, Porignon D, Rockers PC, Van Lerberghe W. The contribution of primary care to health and health systems in low- and middle-income countries: a critical review of major primary care initiatives. Soc Sci Med. 2010; 70(6): 904-911.
12. Shaw JE, Sicree RA, Zimmet PZ. Global estimates of the prevalence of diabetes for 2010 and 2030. Diabetes Res Clin Pract. 2010; 87(1):4–14.
13. Zhang P, Zhang X, Brown J, Vistisen D, Sicree R, Shaw J, Nichols G. Global healthcare expenditure on diabetes for 2010 and 2030. Diabetes Res Clin Pract. 2010; 87(3):293–301.
14. Yach D, Hawkes C, Gould CL, Hofman KJ. The global burden of chronic diseases: overcoming impediments to prevention and control. JAMA. 2004; 291(21):2616–22.
15. Almalki M, FitzGerald G, Clark M. Health care system in Saudi Arabia: an overview/Aperçu du système de santé en Arabie saoudite. East Mediterr Health J. 2011; 17(10):784.
16. Mokdad AH, Tuffaha M, Hanlon M, El Bcheraoui C, Daoud F, Al Saeedi M, Alrasheedy AA, Al Hussein MA, Memish ZA, Basulaiman M. Cost of Diabetes in the Kingdom of Saudi Arabia, 2014. J Diabetes Metab. 2015; 6:575. doi:10.4172/2155-6156.1000575.
17. Robert AA, Al Dawish AM, Braham R, Musallam AM, Al Hayek AA, Al Kahtany HN. Type 2 Diabetes Mellitus in Saudi Arabia: Major Challenges and Possible Solutions. Curr Diabetes Rev. 2017; 13(1):59–64.
18. El Bcheraoui C, Memish ZA, Tuffaha M, Daoud F, Robinson M, Jaber S, Mikhitarian S, Al Saeedi M, AlMazroa MA, Mokdad AH, Al Rabeeah AA. Hypertension and Its Associated Risk Factors in the Kingdom of Saudi Arabia, 2013: a National Survey. Int J Hypertens. 2014; 2014. https://www.hindawi.com/journals/ijhy/2014/564679/abs/.
19. Al-Nozha MM, Abdullah M, Arafah MR, Khalil MZ, Khan NB, Al-Mazrou YY, Al-Maatouq MA, Al-Marzouki K, Al-Khadra A, Nouh MS, et al. Hypertension in Saudi Arabia. Saudi Med J. 2007; 28(1):77–84.
20. Aigbiremolen AO, Alenoghena I, Eboreime E, Abejegah C. Primary health care in Nigeria: from conceptualization to implementation. J Med Appl Biosci. 2014; 6(2): 35-43.

21. Alenoghena I, Aigbiremolen A, Abejegah C, Eboreime E. Primary health care in Nigeria: strategies and constraints in implemntation. Int J Community Res. 2014; 3(3): 74-79.
22. Muhammed KA, Umeh KN, Nasir SM, Suleiman IH. Understanding the barriers to the utilization of primary health care in a low-income setting: implications for health policy and planning. J Public Health Afr. 2013 Oct 7; 4(2): e13.
23. Nwankwo IU, Udeobasi OC, Osakwe CS, Okafor G. Public perception and assessment of primary healthcare service in Mbaukwu Community of Awka South Local Government Area, Anambra State, Southeast Nigeria. Intl J Perceptions Pub Heal. 2017; 1: 121-126.
24. World Health Organization, United Nations Children´s Fund (UNICEF). A vision for primary health care in the 21st century: towards universal health coverage and the sustainable development goals. 2018.
25. World Health Organization. World health report 2013: research for universal health coverage. 2013.
26. Topp SM, Abimbola S. Call for papers-the Alma Ata declaration at 40: reflections on primary healthcare in a new era. BMJ Glob Heal. 2018; 3(2): e000791.
27. World Bank. Improving primary health care delivery in Nigeria: evidence from four states. 2010.
28. Adam VY, Awunor NS. Perceptions and factors affecting utilization of health services in a rural community in Southern Nigeria. J Med Biomed Res. 2014; 13(2): 117-124.
29. Otovwe A, Elizabeth S. Utilization of primary health care services in Jaba Local Government Area of Kaduna State Nigeria. Ethiop J Health Sci. 2017; 27(4): 339-350.
30. Adebayo AM, Asuzu MC. Utilization of a community-based health facility in a low- income urban community in Ibadan, Nigeria. Afr J Prim Health Care Fam Med. 2015 May 5; 7(1): 735.
31. Uzochukwu BSC, Onwujekwe OE, Akpala CO. Community satisfaction with the quality of maternal and child health services in Southeast Nigeria. East Afr Med J. 2004; 81(6): 293-299.
32. Ige OK, Nwachukwu CC. Areas of dissatisfaction with primary health care services in government owned health facilities in a semi- urban community in Nigeria. J Rural Trop Public Health. 2010; 9: 19-23.
33. Bertakis KD, Azari R, Helms LJ, Callahan EJ, Robbins JA. Gender differences in the utilization of health care services. J Fam Pract. 2000 Feb; 49(2): 147-52.
34. Redondo-Sendino A, Guallar-Castillón P, Banegas JR, Rodríguez-Artalejo F. Gender differences in the utilization of health-care services among the older adult population of Spain. BMC Public Health. 2006; 6: 155.
35. Vaidya V, Partha G, Karmakar M. Gender differences in utilization of preventive care services in the United States. J Womens Health (Larchmt). 2012 Feb; 21(2): 140-5.
36. Shaikh BT, Hatcher J. Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers. J Public Health (Oxf). 2005 Mar; 27(1): 49-54.
37. Alfaqeeh G, Cook EJ, Randhawa G, Ali N. Access and utilisation of primary health care services comparing urban and rural areas of Riyadh Providence, Kingdom of Saudi Arabia. BMC Health Serv Res. 2017; 17(1): 1-13.
38. Wong ST, Regan S. Patient perspectives on primary health care in rural communities: effects of geography on access, continuity and efficiency. Rural Remote Health. Jan-Mar 2009; 9(1): 1142.
39. Okoronkwo IL, Onwujekwe OE, Ani FO. The long walk to universal health coverage: patterns of inequities in the use of primary healthcare services in Enugu, Southeast Nigeria. BMC Health Serv Res. 2014; 14: 132.
40. Ehiri JE, Oyo-Ita AE, Anyanwu EC, Meremikwu MM, Ikpeme MB. Quality of child health services in primary health care facilities in south-east Nigeria. Child Care Health Dev. 2005; 31(2): 181-191.
41. Alhashem AM, Alquraini H, Chowdhury RI. Factors influencing patient satisfaction in primary healthcare clinics in Kuwait. Int J Health Care Qual Assur. 2011;24(3): 249-262.
42. Macarayan EK, Gage AD, Doubova SV, Guanais F, Lemango ET, Ndiaye Y et al. Assessment of quality of primary care with facility surveys: a descriptive analysis in ten low-income and middle-income countries. Lancet Glob Heal. 2018;6(11)