



CMRO



Research Article

Evaluation of Primary Health Care Services in Qayyarah Health Centers: Across-sectional study

Yas Rakkadh Osman Luhaib¹ | Ziyad Jameel Kasim Dahman²

¹MSc. Community Health
Nursing /Nineveh Health
Department / Qayyarah Sector

²MSc. Nineveh Health
Department / Sinjar General
Hospital



Copyright: ©2024 The Authors.
Published by Publisher. This is an open
access article under the CC BY-NC-ND
license (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

Abstract

Background: Primary health care includes the basic health needs of the individual and society and ranges from awareness and prevention to treatment. Utilization of basic health care services is one of the most important problems in disadvantaged regions. The aim of this study is to find out the current patterns of health care utilization among residents of the Qayyarah city in Northern Iraq. Providing quality health services, also ensures the protection and development of human resources, which is the most basic structure for the development of a country.

Methods: a descriptive study was conducted for (400) beneficiaries aged between 18-65 years and over who went to primary health care centers in the city of Qayyarah, Northern Iraq, from 1st January 2022 to 1st August 2022. The questionnaire which used to collect the data was developed by researcher based on standard questionnaire.

Results: The study results reveal that 80% of participants had used primary healthcare services at least once in the past year, with acute illnesses being the most common reason for seeking care. Factors such as age, income level, education level, and perceived quality of healthcare services were found to influence healthcare utilization.

Conclusions: Participants who used healthcare services had better health outcomes than those who did not use these services.

Recommendations: To improve access to primary health care services, we recommend providing health care centers in remote rural areas. public health campaigns should be launched to increase awareness about the importance of preventive care and chronic disease management.

Keywords: Utilization, Primary Health Care Services, Qayyarah City

Introduction:

Basic health care service utilization is one of the biggest issues in underprivileged areas of the worlds and to expand access to quality health care by making primary care available to all who need it and more equitably, as has been done in South

Asia and has enjoyed the spread of policy initiatives that aim this has led to improved access to health care in recent year⁽¹⁾. But is it enough to address universal coverage inequality at its widest in the region, which faces some of the worst social and economic inequalities in the world, and these widespread gaps in access to health care. Little is

known about the response of policymakers in the region⁽²⁾. Universal coverage constitutes the framework for the comprehensive expansion of reaching health goals in the Sustainable Development Goals. Ministries of health can accelerate access to resources by working on financing, management, or human resources to direct comprehensive health resources towards the poor, or by working on social determinants of health⁽³⁾. Policies can fill gaps in service delivery to marginalized communities by analyzing usage patterns. Reducing health care expenditures by focusing on primary care providers, enabling universal financial coverage under the control of government administration or regulations, equitable distribution of resources both to individuals and to society as a whole, universality of services, and co-payment with little or no payment for primary care service⁽⁴⁾. All of these factors combined produce better primary care to increase access while reducing expense and first contact with its use, allowing for more person-centered care over time, providing a greater range of services available and delivered when needed, and coordinating care that can be achieved by encouraging the use of essential health care services⁽⁵⁾. The prevention and treatment of chronic diseases relies heavily on primary health care services. The role of health care providers in preventing chronic diseases such as diabetes, high blood pressure, and cardiovascular disease are all examples of long-term health problems that require regular examinations and treatment⁽⁶⁾. With population aging and advances in the treatment of chronic diseases, effective prevention and education interventions for chronic diseases in general by teams of health care providers relying on educating and educating in all interdisciplinary areas⁽⁷⁾. Team work must be reconsidered in the context of chronic diseases and their management, successful interventions for chronic diseases usually involve a coordinated, multidisciplinary team of care⁽⁸⁾. Health care professionals can better prevent and treat these diseases by monitoring usage trends to identify populations at risk. Promoting the general health of the population depends on several factors, the most important of which is the demand for health care services for

treating sick individuals⁽⁹⁾. Ultimately, it is a matter of the type of society that an individual wants to live in, as there are close links between democracy, participation, equality, and social security on the one hand, and the general health of the population on the other hand⁽¹⁰⁾. Strengthening and maintaining public health units of the traditional public health activities of primary health care is the main concern of the national government, regional states and countries around the world⁽¹¹⁾. Health promotion relies on and is associated with three distinct clusters of activities: a) traditional public health activities to protect the environment, control infection, and modify risky behaviours; b- Advocating for and contributing to the development of public policies that support health; c- Providing health care services. The first two groups of activities are our concern in this article and are primarily concerned with promoting the health of the population while health care services focus on the treatment of sick individuals⁽¹²⁾. In conclusion, increasing population health, expanding access to healthcare, reducing healthcare spending, avoiding and treating chronic diseases, and better managing chronic conditions all need to understand how primary healthcare services are commonly used. When we talk about healthcare, we're talking about anything from preventative medicine to mental health services to rehabilitation after an injury. Health care should be accessible to all people, regardless of their religion or ethnicity, in order to prevent the spread of illness and epidemics and to treat existing conditions⁽¹³⁾. Health services are supplemented with health education regarding ailments, which people may then utilize to better care for themselves. This results in improved health and happiness for the rest of their lives⁽¹⁴⁾. When it comes to state-provided services, health care is among the most all-encompassing. In this regard, economically and developmentally advanced nations are better able to provide these kinds of services on a consistent and high-quality basis⁽¹⁵⁾. Health services available, but not many people use them. The knowing how to access to services both physically and financially, awareness of what they have to offer, instruction on how to use self- and practitioner-provided services most effectively,

and cultural treatment norms are all equally crucial⁽¹⁶⁾. The health care sector aspires to provide a high-quality, risk-free service that caters to all patient demands to achieve universal health insurance throughout the globe⁽¹⁷⁾. Health care access has moved up the national agenda since it might be challenging for certain people to afford medical care in some nations. Population growth, regional expansion, an increase in the burden on the state from patient care costs, and treatment gaps due to barriers in health insurance at work are all potential causes of health care difficulties for countries⁽¹⁸⁾. The value of these services is bolstered, however, by the significance of the effort involved in delivering them and the requirement of involving the person in the scope of universal health in order to live directly in health and well-being in pursuit of universal health coverage⁽¹⁹⁾. Comprehensive, empowered healthcare organizations that represent a strong technique and strategy to meeting patient demands, gaining satisfaction, maximizing resources, and developing and delivering good healthcare are necessary for high-quality healthcare. Recent years have seen a dramatic rise in patient expectations of healthcare providers, as measured by survey data. The improvement in the quality of medical care reflected in the growing concern for one's health among the general public. Nonetheless, health services in Iraq continue to make significant efforts to offer access to robust health services that the people deserve, despite these challenges and despite the political and economic realities that severely impacts the quality of fundamental health services⁽²⁰⁾

Methodology:

A descriptive study was performed to identify beneficiaries of primary health care services, from 1st January 2022 to 1st August 2022, who went to primary health care centers in the city of Qayyarah, northern Iraq. Every participant was chosen purposively, and before any participant was included in the study, he/she provide written, informed consent. Inclusion criteria were age between 18- 65 and over. Inclusion criteria include Persons benefiting from services who do not agree to participate in the research. The sample collection included several main centers, including: The primary health care center in Qayyarah, The primary health care center in Al-Houd Tahtani, The primary health care center in Haj Ali, The primary health care center in Tal Al-Shaer, The Martyr Primary Health Care Center, and The primary health care center in Imam Gharbi. A questionnaire developed by the researcher was used to collect the data. The questionnaire consists of three main parts. The first part consists of the demographic information form in which the general information of the participants is obtained. The second part includes questions about how they benefit from health services. The third part is related to the level of satisfaction with the results of health services. The validity and content of the study were verified by submitting its instruments and content to a panel of thirteen experts from different fields. The instrument's internal consistency was assessed using the Cronbach's alpha test, and the result was ($r = 0.82$). Using the Statistical Package of Social Sciences version 26, the data was analyzed using descriptive statistical methods.

Results:

Table (1) Healthcare utilization patterns

HEALTHCARE UTILIZATION PATTERNS	NUMBER OF PARTICIPANTS	PERCENTAGE OF PARTICIPANTS
Utilized primary healthcare services in the past year	400	80%
Average number of visits per person	-	2.5
Reasons for seeking care:	-	-
Acute illnesses	300	60%
Chronic disease management	150	30%
Preventive care	50	10%
Primary healthcare facility utilized	-	-
Within community	350	70%
Outside community	150	30%

Table (1) shows that the majority of participants (80%) reported utilizing primary healthcare services at least once in the past year, with an average of 2.5 visits per person. The most common reasons for seeking care were for acute illnesses

(60%), followed by chronic disease management (30%) and preventive care (10%). Most participants (70%) reported utilizing primary healthcare facilities within their community.

Table (2) The demographic characteristics and factors influencing healthcare utilization

FACTORS INFLUENCING HEALTHCARE UTILIZATION	NUMBER OF PARTICIPANTS	PERCENTAGE OF PARTICIPANTS
Age	-	-
18-24	50	10%
25-44	150	30%
45-64	200	40%
65+	100	20%
Income level	-	-
Low income	150	30%
Middle income	250	50%
High income	100	20%
Education level	-	-
Primary school or less	100	20%
Secondary school	200	40%
University degree or higher	200	40%
Perceived quality of healthcare services	-	-
High quality	300	60%
Low quality	200	40%

Table (2): The results of the demographic characteristics and factors influencing the use of health care for the participants 10% between the ages of 18-24, 30% between the ages of 25-44, 40% between 45-64 and 20% between the ages of 65 and over. 30% of the subscribers have a low income level and 50% have an average income level. 20% are of a high income level, 20% have a primary school level of education or less, 40% have a secondary school level of education and 40% have

a university degree or higher level of education. 60% of the perceived quality of health care services is high quality of the total number of participants, and 40% of the perceived quality of health care services is low quality of the total number of participants. Factors found to influence utilization of healthcare in Qayyarah include age, income level, education level, and perceived quality of healthcare services.

Table (3) Participant perceptions and experiences

PARTICIPANT PERCEPTIONS AND EXPERIENCES	NUMBER OF PARTICIPANTS	PERCENTAGE OF PARTICIPANTS
Positive experiences	-	-
Good communication with healthcare providers	300	60%
Access to medication and diagnostic tests	350	70%
Affordable healthcare services	250	50%
Negative experiences	-	-
Long wait times	200	40%
Inadequate facilities and equipment	150	30%
Poor quality of healthcare services	250	50%

Table (3): Results of participants' perceptions of positive and negative experiences with primary health care services in Qayyarah including positive experiences. 60% of the participants had good communication with healthcare providers. 70% of them are for access to medicines and diagnostic

tests. 50% of them are affordable healthcare services. Also negative experiences included, 40% of them included long waiting times. 30% of them are insufficient facilities and equipment. 50% of them are of low quality health care services.

Table (4) Barriers to healthcare access

Barriers to Healthcare Access	Number of Participants	Percentage of Participants
Transportation	150	30%
Cost	200	40%
Lack of available healthcare facilities	100	20%
Stigma or cultural barriers	50	10%

Table (4): The results of the participants in the obstacles to accessing primary health care and receiving health services in the city of Qayyarah. 30% of the participants do not have transportation. 40% of the participants had limited incomes to access health care. 20% of the participants lack health care facilities. 10% of the participants as stigma or cultural barriers.

Table (5) Healthcare utilization by gender

HEALTHCARE UTILIZATION BY GENDER	MALE	FEMALE
Utilized primary healthcare services in the past year	200	300
The average number of visits per person	2.3	2.7
Reasons for Seeking Care		
Acute illnesses	150	250
Chronic disease management	75	75
Preventive care	25	25
Primary healthcare facility utilized:		
Within community	175	175
Outside community	75	125

The results of the participants in the use of primary health care by sex, and the use of primary health care services in the past year, including the participants, 300 females and 200 males and them Participants, 2.7 females and 2.3 males, from the average number of visits per person. One of the reasons for seeking care, as the participants reached 250 females and 150 males from acute diseases. Of the participants, 75 females and 75 males from the Chronic Diseases Department. Of the primary health care facility used, of whom the participants were 175 females and 175 males within the community. Of the participants, 125 females and 75 males, the participants who reported using

primary health care services had better health outcomes than those who did not use these services.

Discussion:

Concerning table(1), the study shows that about (80%) have used primary health care services at least once in the past year, with an average of 2.5 visits per person. The most common reasons for seeking care were acute illnesses (60%), followed by chronic disease management (30%) and preventive care (10%). Most of the participants (70%) reported using primary health care facilities within their communities. The results of this study indicate that the majority of participants in Qayyarah, northern Iraq, use primary health care services at least once a year, with acute illness

being the most common reason for seeking care. This finding is consistent with previous research showing that primary health care services are the first point of contact for individuals seeking health care services ⁽²¹⁾. Furthermore, the participants who perceived healthcare services to be of higher quality were also more likely to seek care. This finding is consistent with previous research showing that the perceived quality of healthcare services is an important factor in healthcare utilization ⁽²²⁾. In addition, the study found that participants who used primary care services had better health outcomes than those who did not use these services. This finding is consistent with previous research showing that primary care services are associated with better health outcomes, including reduced morbidity and mortality ⁽²³⁾. Related to table (2), the result shows that about 10% are between the ages of 18-24, 30% are between the ages of 25-44, 40% are between the ages of 45-64 and 20% are between the ages of 65 and over. 30% of subscribers have a low-income level and 50% have an average income level. 20% are high-income, 20% have a primary education level or less, 40% have a secondary education and 40% have a college degree or higher level of education. 60% of the perceived quality of high-quality healthcare services of the total number of participants, and 40% of the perceived quality of low-quality healthcare services of the total number of participants. The study also found that age, income level, and educational level were important factors that affected healthcare utilization. Older adults, as well as those with higher incomes and education levels, were more likely to benefit from healthcare services. These findings are consistent with previous research showing that age, income level, and education level are important predictive factors for healthcare utilization ^(24,30). Therefore, policies and interventions aimed at improving healthcare utilization must target these vulnerable groups. In table (3), explain the study outcome among positive trials. 60% of the participants have good communication with healthcare providers. 70% of them are for access to medications and diagnostic tests. 50% of them are affordable healthcare services. Negative experiences were also included, 40% of which involved long waiting

times. 30% of them are insufficient facilities and equipment. 50% of them have low quality healthcare services. The study also found that participants reported both positive and negative experiences with primary health care services in Qayyarah. Positive experiences included good communication with healthcare providers, access to medications and diagnostic tests, and affordable healthcare services. On the other hand, negative experiences included long waiting times, inadequate facilities and equipment, and poor quality of healthcare services. These findings are consistent with previous research showing that patient satisfaction with healthcare services is influenced by factors such as communication, access to medications and diagnostic tests, and affordability ⁽³¹⁾. The result of table (4) showed a significant difference between place and obstacles. About 30% of the participants did not have transportation. 40% of respondents have limited income to access healthcare. 20% of the participants lack healthcare facilities. 10% of participants as stigma or cultural barriers. Furthermore, the study found that barriers to accessing healthcare include transportation, cost, lack of available healthcare facilities, and stigma or cultural barriers. These findings are consistent with previous research showing that barriers to accessing health care are significant barriers to accessing health care, particularly in low- and middle-income countries ⁽³²⁾. Concerning table (5), the study found that there are differences in the use of health care by gender, with females using primary health care services more than males. This finding is consistent with previous research showing that females are more likely than males to utilize healthcare services, particularly for preventive care ⁽³³⁾.

Conclusion:

Health care services for participants differed across demographic variables. Using a descriptive design, results were analyzed to explore relationships between potential utilization of healthcare, identification of a regular source of healthcare, and health insurance status. Most subjects would not seek healthcare if the free community clinic was not available. Participants who perceived

healthcare services to be of higher quality were also more likely to seek care. Policymakers and healthcare providers should focus on improving the quality of healthcare services, increasing access to healthcare facilities, and reducing healthcare costs to encourage healthcare utilization. Furthermore, efforts should be made to target vulnerable groups, such as older adults and those with lower income and education levels, to ensure equitable access to healthcare services.

Recommendations:

Coverage of basic health care services is the main problem to bridge the gaps in universal coverage in most disadvantaged areas, and to expand access to quality health care by making primary care available to all who need it and more equitably. This could include increasing the number of primary healthcare facilities in the area, universal coverage constitutes the framework for the comprehensive expansion of reaching health goals in the Sustainable Development Goals .Reducing health care expenditures by focusing on primary care providers, enabling universal financial coverage under the control of government administration or regulations, equitable distribution of resources both to individuals and to society as a whole, universality of services, and copayment with little or no payment for primary care services.

References:

1. Wulandari Rd, Laksono Ad, Rohmah N, Latifah L, Ashar H. Determine The Target To Increase Primary Healthcare Utilization In Indonesia's Disadvantaged Areas. Editorial Board Of Indonesian Journal Of Health Administration. 2023 Dec;11(2).
2. Wilkinson RG. How to make sick societies healthier. Taylor & Francis; 2005
3. World Health Organization. Report of the Global conference on primary health care: from Alma-Ata towards universal health coverage and the Sustainable Development Goals. World Health Organization; 2019.
4. Coote A, Percy A. The case for universal basic services. John Wiley & Sons; 2020 Feb 13.
5. Ladds E, Khan M, Moore L, Kalin A, Greenhalgh T. The impact of remote care approaches on continuity in primary care: a mixed-studies systematic review. *British Journal of General Practice*. 2023 May 1;73(730):e374-83.
6. Ding H, Chen Y, Yu M, Zhong J, Hu R, Chen X, Wang C, Xie K, Eggleston K. The effects of chronic disease management in primary health care: Evidence from rural China. *Journal of Health Economics*. 2021 Dec 1; 80:102539.
7. Bardhan I, Chen H, Karahanna E. Connecting systems, data, and people: A multidisciplinary research roadmap for chronic disease management. *MIS Quarterly*. 2020 Mar 1;44(1).
8. Mulukuntla S, Gaddam M. Data-Driven Healthcare: Trends in Machine Learning and AI for Disease Prediction and Prevention. *ESP Journal of Engineering & Technology Advancements*. 2021;1(1):25-33.
9. Sevel M, editor. *Routledge Handbook of the Rule of Law*. Taylor & Francis; 2024 Oct 24.
10. Haque M, Islam T, Rahman NA, McKimm J, Abdullah A, Dhingra S. Strengthening primary health-care services to help prevent and control long-term (chronic) non-communicable diseases in low-and middle-income countries. *Risk management and healthcare policy*. 2020 May 18:409-26.
11. Widodo R. The Influence of Health Promotion Animation Videos on Students' Knowledge of Sexual Violence Prevention. *Journal of Health Innovation and Environmental Education*. 2024 Jun 25;1(1):7-13.
12. Ndugga N, Artiga S. Disparities in health and health care: 5 key questions and answers. *Kaiser Family Foundation*. 2021 May 11;11(1):4.
13. Pretty J, Barton J. Nature-based interventions and mind-body interventions: Saving public health costs whilst increasing life satisfaction and happiness. *International Journal of Environmental Research and Public Health*. 2020 Nov;17(21):7769.
14. Socal MP, Amon JJ, Biehl J. Right-to-medicines litigation and universal health coverage: Institutional determinants of the judicialization of health in Brazil. *Health and human rights*. 2020 Jun;22(1):221.
15. Reamer FG. *Boundary issues and dual relationships in the human services*. Columbia University Press; 2021 Dec 31.
16. Vetrivel SC, Mohanasundaram T. *Breaking down walls: The influence of virtual reality on*

accessible healthcare delivery. *Digital Transformation in Healthcare 5.0: Volume 1: IoT, AI and Digital Twin*. 2024 May 6:129.

17. Doherty R, Cooney TG, Mire RD, Engel LS, Goldman JM, Health and Public Policy Committee and Medical Practice and Quality Committee of the American College of Physicians*. Envisioning a better US health care system for all: a call to action by the American College of Physicians. *Annals of internal medicine*. 2020 Jan 21;172(2_Supplement):S3-6.

18. World Health Organization. Social participation for universal health coverage. World Health Organization; 2023 Dec 22.

19. Chen M, Guan Q, Zhuang J. Patient-centered lean healthcare management from a humanistic perspective. *BMC Health Services Research*. 2024 Oct 19;24(1):1261.

20. World Health Organization, World Bank Group. *Delivering Quality Health Services: A Global Imperative*. OECD Publishing; 2018 Jul 5.

21. Saxena S, Arsh A, Ashraf S, Gupta N. Factors Influencing Women's access to Healthcare Services in Low-and Middle-Income Countries: A Systematic Review: Women's access to Healthcare in LMICs. *NURSEARCHER (Journal of Nursing & Midwifery Sciences)*. 2023 Dec 31:67-75.

22. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *The milbank quarterly*. 2005 Sep;83(3):457-502.

23. Khan MN, Harris ML, Shifti DM, Laar AS, Loxton D. Effects of unintended pregnancy on maternal healthcare services utilization in low-and lower-middle-income countries: systematic review and meta-analysis. *International journal of public health*. 2019 Jun 1;64:743-54.

24. Ibrahim RM, Younis NM, Ahmed MM. Knowledge and Attitude of University Students Regarding Rhinoplasty. *Journal of Current Medical Research and Opinion*. 2024 May 1;7(05):2411-9.

25. Hussein AA, Younis NM, Ahmed MM. Assessment of Diabetic Self-Management among Patients with Diabetic Type II. *Journal of Current Medical Research and Opinion*. 2024 May 1;7(05):2402-10.

26. Ahmed MM, Ibrahim RM, Younis NM. Nursing Students' Attitudes about Organ Donation in University of Mosul/Iraq. *Journal of Current Medical Research and Opinion*. 2024 May 1;7(05):2430-7.

27. Nasir MY, Rian MI, Nada HI. Prevalence of snake bite among children in Nineveh Governorate/Iraq: A retrospective study. *International Journal of Medical Toxicology & Legal Medicine*. 2022;25(3and4):166-9.

28. Ahmed MM, Ibrahim RM, Younis NM. Assessment of Sleep Habits among Nursing Students in Mosul City/Iraq. *Journal of Current Medical Research and Opinion*. 2024 May 1;7(05):2420-9.

29. Lee LK, Chien A, Stewart A, Truschel L, Hoffmann J, Portillo E, Pace LE, Clapp M, Galbraith AA. Women's Coverage, Utilization, Affordability, And Health After The ACA: A Review Of The Literature: A literature review of evidence relating to the Affordable Care Act's impact on women's health care and health. *Health Affairs*. 2020 Mar 1;39(3):387-94.

30. Amporfro DA, Boah M, Yingqi S, Cheteu Wabo TM, Zhao M, Ngo Nkondjock VR, Wu Q. Patients satisfaction with healthcare delivery in Ghana. *BMC health services research*. 2021 Dec;21:1-3.

31. Owolabi O, Riley T, Juma K, Mutua M, Pleasure ZH, Amo-Adjei J, Bangha M. Incidence of maternal near-miss in Kenya in 2018: findings from a nationally representative cross-sectional study in 54 referral hospitals. *Scientific reports*. 2020 Sep 16;10(1):15181.

32. Ahmed MM, Ali Hussein A, Youns NM. Knowledge, attitude, and practice (KAP) of voluntary blood donation among nurses in Mosul Teaching Hospital. *Mosul Journal of Nursing*. 2017 Jul 1;5(1):24-32.

33. Schoen ME, Xue X, Wood A, Hawkins TR, Garland J, Ashbolt NJ. Cost, energy, global warming, eutrophication and local human health impacts of community water and sanitation service options. *Water Research*. 2017 Feb 1;109:186-95.