FACTORS MILITATING AGAINST UTILISATION OF PRIMARY HEALTH CARE FACILITY IN A SELECTED RURAL COMMUNITY OF SOUTHWESTERN, NIGERIA

BEATRICE D. ADEOYE (PhD)
Department of Sociology
Federal University, Oye – Ekiti. Ekiti State.

OLUTAYO A. ADEBAYO
Department of Criminology and Security Studies
Federal University, Oye – Ekiti. Ekiti State

ABSTRACT

Development, individual, community, and national depends critically on their state of health. Primary Health care (PHC) is an anchor in health service delivery because it meets basic health requirements and promotes equitable access to medical treatment, especially in rural regions. Even while there are PHC facilities in rural regions, they are not being used to their full potential. Thus, this study investigates the factors militating against the utilization of Primary Health Care facilities in selected rural communities in Southwestern Nigeria. The research adopted a mixed method (quantitative and qualitative) on the study population which consists of rural dwellers aged 18 year using Yamane's formula (1967) a sample size of 200 were calculated. Multistage sampling technique was used. Data was collected through structured questionnaires using the non-probability (purposive method) sampling methods to select participants. This study found that most respondents (69.5%) strongly agreed that the cost of accessing primary healthcare is too high for many rural residents. The study recommends reduced out-of-pocket payments by subsidizing healthcare services, making them affordable to low-income rural residents.

1.0 INTRODUCTION

The process of gaining access to healthcare services is complex and involves several factors, including the acceptability of the service, financial, geographical and availability of the appropriate care for those in need, and quality of care (Nunez et al., 2020). The majority of Nigerians reside in rural areas where agriculture is the primary industry. When it comes to the availability of contemporary health care services, Nigerian rural areas receive the least attention and its citizens the least (Effiong & Aya, 2022). Since many rural communities lack the fundamental infrastructure needed to maintain and promote good health, many of their residents have been compelled to engage in various forms of illness-seeking conduct in an attempt to cope with their perceived illnesses. the majority of respondents in the rural blend traditional and western health care services, with very few using western health care services (Adeoye et al,2021)

In many regions of sub-Saharan Africa, health care utilisation has remained low despite the enormous potential that effective healthcare interventions have for the wellbeing of rural people (Bian et al, 2022). According to Beatrice (2016), numerous factors have been linked in previous studies to low health care utilisation. For instance, the distance between medical facilities and communities has long been recognised as a major deterrent to the use of healthcare services. Many rural residents in this situation must travel great distances in order to receive treatment. The unequal distribution of healthcare facilities and the shortage of medical professionals in rural areas as a result of a lack of funding for healthcare have also been found to be barriers to efficient health care use (Wang et al., 2019). Lack of funding is a result of the health sector's inadequate fiscal allocation as well as administrative corruption and bureaucracy.

According to Ajayi et al. (2023), poor access to healthcare services has caused a decline in life expectancy among rural residents in Ekiti State, Nigeria. Evaluated how Ekiti State's rural residents used Western and Traditional healthcare services. According to Cheng et al. (2023), many households had no reservations about the advantages of using western health care services over traditional ones; their main complaints were about the high expenses, time wasted, and dreadfully subpar primary health care facilities.

In Nigeria, there has been a growing recognition of the challenge of rural people's health issues and the need for it to be addressed (Hamid et al., 2021). However, despite the importance of primary health care centres to address some of the rural health problems, there are various challenges that hinder the effective utilization of the primary healthcare system in the country. One of the significant challenges faced by the primary healthcare system in Nigeria most especially in rural areas is the lack of standard medical facility. Many primary healthcare centers in rural and underserved areas are poorly equipped, lack essential medical equipment, and suffer from a shortage of healthcare professionals (Beatrice, 2016). This inadequacy limits the quality and range of services that can be provided, leading to a decreased utilization of primary healthcare services (Li et al., 2020).

According to Atobatele (2022), Geographic disparities and limited access to primary healthcare services pose a significant challenge in Nigeria. Rural areas and remote communities often have limited or no access to primary healthcare facilities, forcing the population to travel long distances to seek medical attention. This lack of accessibility hampers the utilization of primary healthcare services, particularly among vulnerable populations, such as the elderly, pregnant women, and children in most of the rural areas (Beatrice, 2016). The shortage of healthcare professionals, including doctors, nurses, and midwives, is a critical challenge affecting the utilization of primary healthcare services. There is an imbalance in the distribution of healthcare workers, with many gravitating towards urban areas and leaving rural areas underserved. The inadequate availability of skilled healthcare providers limits the capacity of primary healthcare centers to deliver comprehensive services, resulting in decreased utilization (Atobatele, 2022). Also, insufficient funding and inadequate allocation of resources to primary healthcare services impede their effective utilization (Adeoye, 2015). According to Balogun (2022) Nigeria faces challenges in allocating a significant portion of its healthcare budget to primary healthcare, with a

disproportionate focus on tertiary and specialized care. This financial constraint affects the availability of essential drugs, medical supplies, and infrastructure maintenance, making it difficult for primary healthcare centers to deliver quality services and attract patients. In summary according to Ekenna et al (2022), the challenges facing the utilization of primary healthcare services in Nigeria are multifaceted and interconnected. Inadequate infrastructure, limited access, workforce shortages, financial constraints, and lack of awareness collectively contribute to the underutilization of primary healthcare services. Hence this study focuses on Identify the health care services and facilities accessible to rural dwellers, examine the level of utilization of primary healthcare facilities, Identify the factors hindering efficient health workforce development in rural areas, Investigates the challenges affecting the utilization of primary healthcare system in rural areas and identify the measures and strategies to improve the utilization of primary healthcare services in rural areas.

2.0 THEORETICAL FRAMEWORK

The health belief model, which was introduced by Rosenstock in 1966 as a means of examining and encouraging the use of healthcare services, served as the theoretical basis for this investigation. Becker and colleagues expanded on HBM in 1988 to take into account the growing body of research in the medical field about the significance of knowledge and perceptions in individual health responsibility. A careful analysis of the model's interconnected parts is essential to comprehending it and the cause of its proven performance. The goal of the HBM is to evaluate a person's physical health behaviour by looking at their views and opinions about illness and the consequences of their behaviours. Essential Statements and Assumptions the HBM is predicated on the idea that an individual will act in a health-related manner (e.g., go to a birth control centre) if that individual: 1. Seems that an adverse medical problem (e.g., STIs, unwanted pregnancy) can be stayed away from; 2. Has an optimistic belief that by acting in a suggested manner, he or she will steer clear of a negative health state (e.g., good knowledge, mindset, and execution of reproductive health will be operational at averting pregnancy that is unplanned and sexually transmitted disease, Perceived vulnerability, perceived risk, perceived gains, and perceived obstacles are the four variables that describe the perceived danger and net advantages that make up the HBM. It was suggested that these ideas would explain people's "readiness to act." Cues to action, an additional idea, could signal this preparedness and encourage overt behaviour. The idea of self-efficacy, or one's belief in one's capacity to carry out an activity effectively, is a more recent addition to the HBM (Nkukpornu, 2015). In order to improve someone's quality of life, the HBM aims to raise consciousness about how severe the consequences of certain behaviours might be. According to this concept, a person's decision to take preventative measures to avoid sickness stems from their belief that they are vulnerable to the disease and that any personal consequences of the condition would be severe. Modifying variables influence how the danger is perceived. These variables include related to structure, sociopsychological, and epidemiological ones that might affect and the associated signals required to initiate action.

3.0 METHODOLOGY

The study was conducted in rural communities in Oye-Ekiti local government, Ekiti state, Nigeria. The study population consists of rural dwellers aged 18 year and above irrespective of any other social demographic factors. Using Yamane's formula (1967) sample size of 200 were calculated. Multistage sampling technique was used. 4 rural communities were randomly selected from Oye local government. In each selected communities 10 household were purposively selected to make up 40 households. In each of the households, non-probability (purposive method) sampling methods was adopted to selected 5 respondents that 18 years and above and willing to give adequate information on the subject of research which make up 200 respondents in all. Qualitative data was also gathered to compliment the quantitative data. 7 sessions of key informants' interview (KII) were conducted on 4 chiefs (2 men and 2 women) and 3 health workers in Ayegbaju health centre. Statistical package for social sciences (SPSS) was used to analysed quantitative data while qualitative data were content analysed.

4.0 FINDINGS

Figure1 Percentage Distribution on Socio-Demographic Characteristics of Respondents
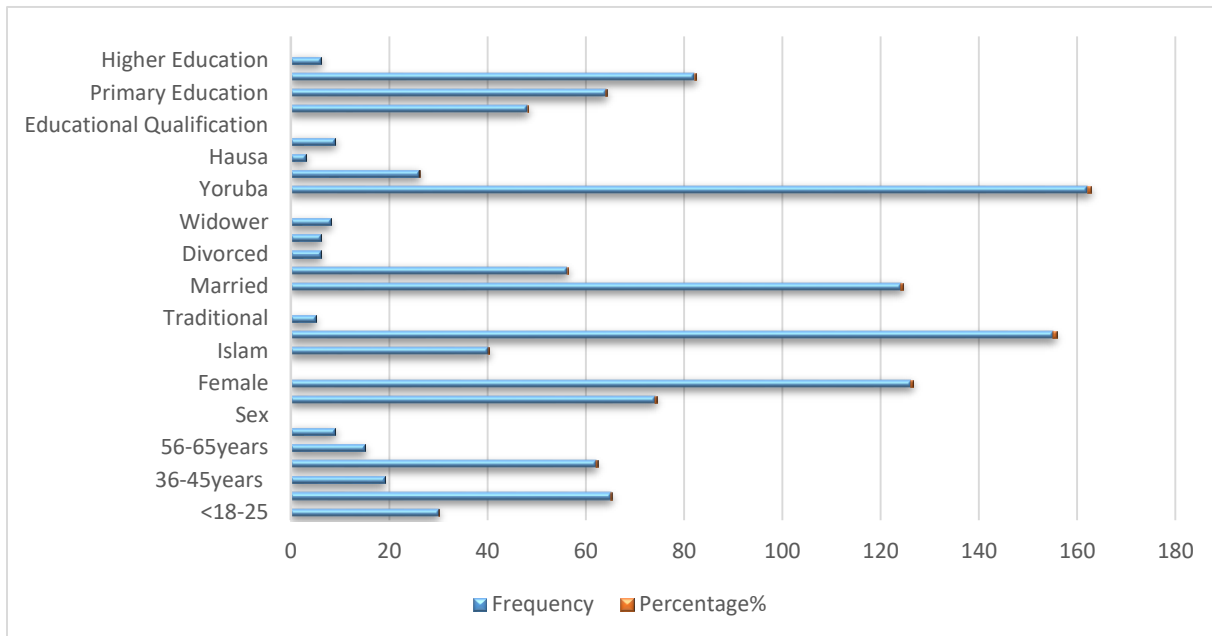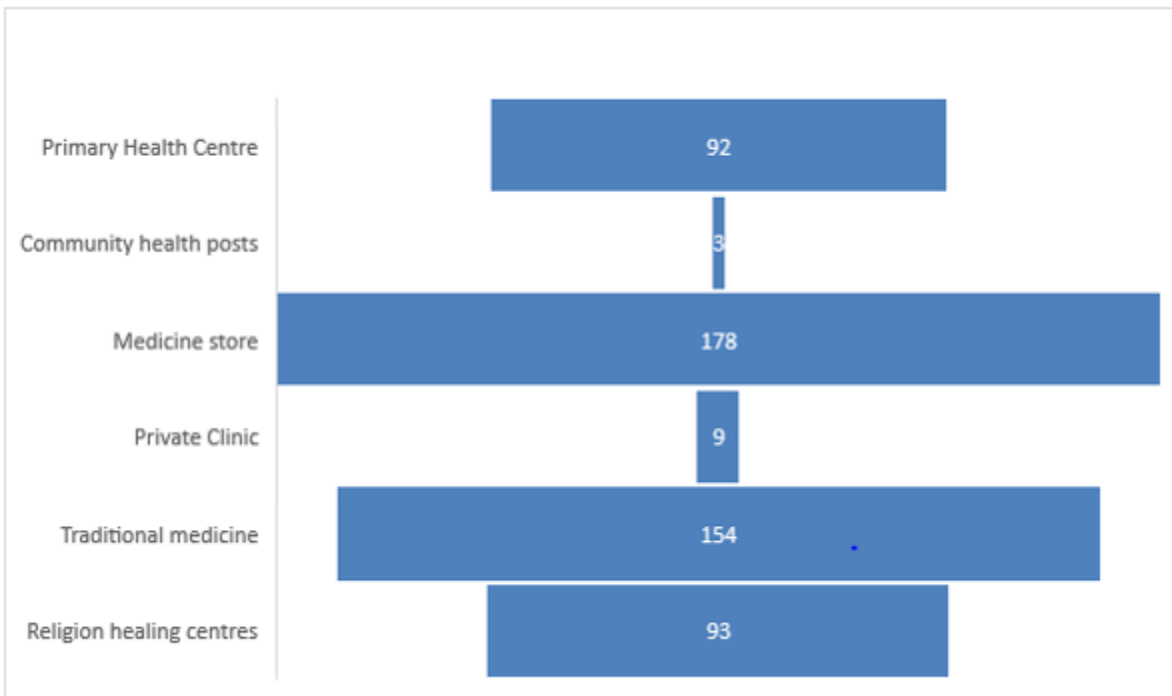

(**Source:** Field Survey, 2024)

Figure 1 revealed the socio-demographic characteristics of respondents. Regarding the gender of the respondent's majority (63%) were female. This may be due to that fact women are more accessible and they make use of health facilities more. Majority (30.5%) falls under the age of 26-35 years. It clearly depicts that the majority of the respondents are within reproductive age and have more knowledge of the subject matter. As pertaining to their religion affiliation, the findings revealed that majority of the respondents 77.5% were Christians. This may be related to the fact that Ekiti state is Christians dominated areas. 62.0% of the respondents were married which is in

line with the age bracket of respondent. In term of educational qualification, though quite (24%) of respondents did not have formal education and this is because the study is conducted in the rural area. Notwithstanding, 32% and 41% have primary and secondary school education respectively which will also help them to related with the questionnaire. Additionally, each questionnaire item is interpreted by the researcher in the individual's native tongue, and 81.0% of the respondents spoke Yoruba. The study was carried out in southwest Nigeria.

Figure 2 Multiple Reponses on Type of Accessible Health Care Services in Oye-Ekiti LG

(**Source**: Field Survey, 2024)

Figure 2 is on the distribution of the respondents on the type of accessible health care services in their community. The findings revealed that the majority 89.0% find medicine store more accessible followed by people 77.0% that find traditional medicine more accessible. 46.0% indicated primary health centre accessible. This finding corroborates the responses of the respondents on where they will consult first if they are sick in the study titled: Sociological Inquiry into Perception and Health Seeking Behaviour of Tuberculosis in Oyo State by Adeoye et al (2020), in which majority of the respondents indicated medicine stores and traditional healing places

Figure 3 Common Health Issues and Concerns Faced by Rural Dwellers in Oye-Ekiti LG
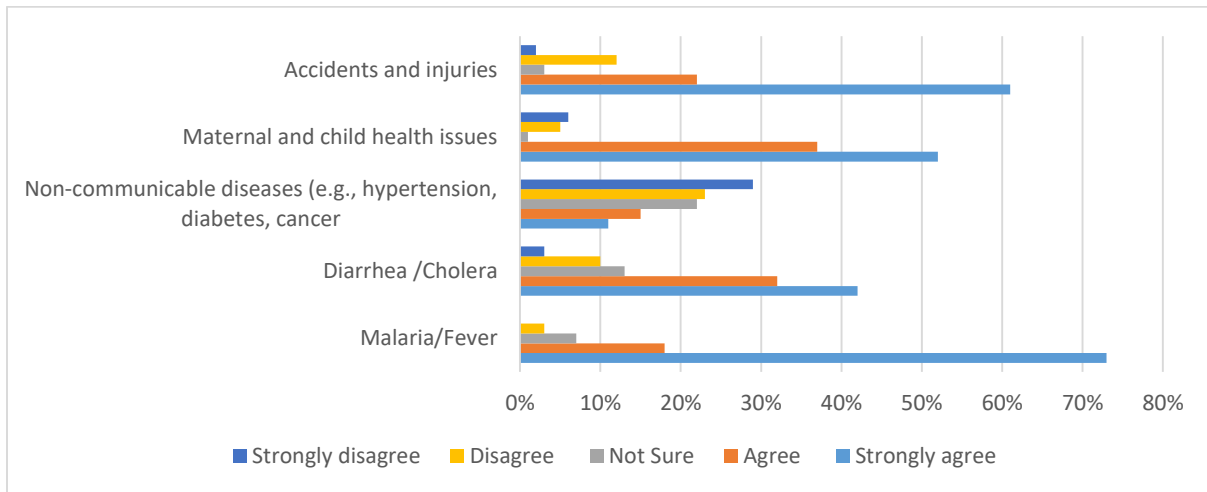
(**Source:** Field Survey, 2024)

In figure 3 above rural dwellers in the study area indicates some common health challenges they do face in which malaria (73%) is the most prevalent, followed by issues related to accidents and injuries 61% and maternal and child health 52%. The implication of the finding is that rural area common health issues need no sophisticated medical garget but just a few medical equipment that could be used to attend to their immediate health need as indicated in figure 3

Figure 4 How often do you visit the primary healthcare facility in your community?
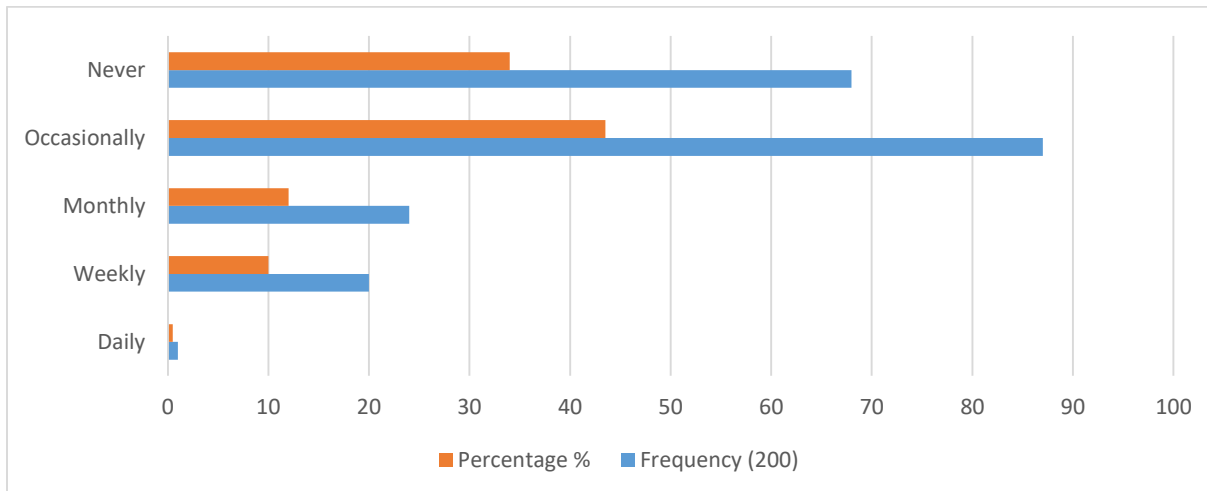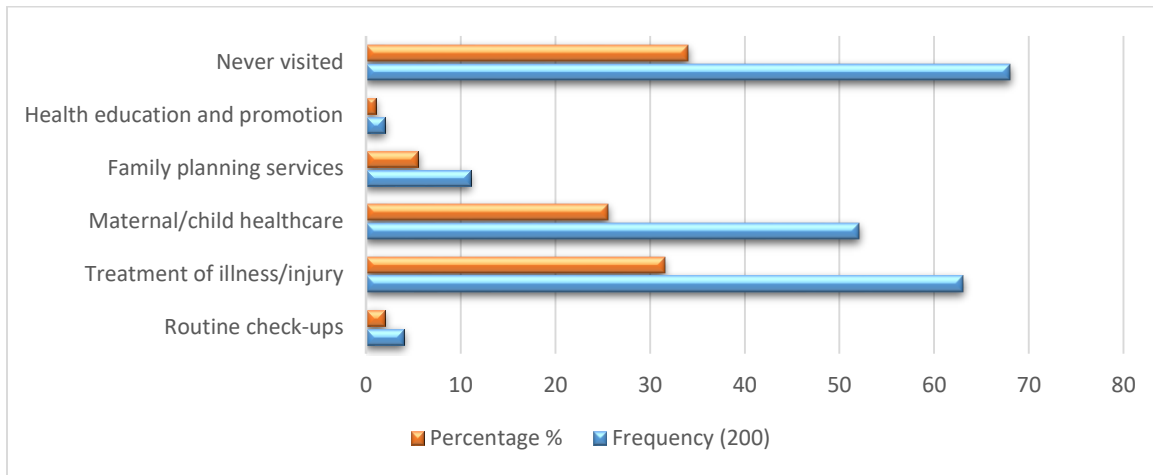

(**Source:** Field Survey, 2024)

Figure 4 revealed how often the respondents visit the primary healthcare facility in their community. The findings revealed that the most common frequency of visits to the primary healthcare facility is "Occasionally" at 43.0% followed by respondents (34%) that never visit primary health facility. This show poor patronage of primary health centre and this may also be the reason why medical personnel are not motivated. The finding corroborates the result from the

study carried out by Adeoye et al (2020) on sociological inquiry into perception and health seeking behaviour of Tuberculosis in Oyo in which only 14.5% go to clinic/hospital for treatment while majority prefer self-medication and traditional/faith based.

Figure 5 Main reason for visits to the Primary Healthcare Facility

(**Source**: Field Survey, 2024)

The figure 5 shows that the most common reason for visiting the Primary Healthcare Facility is for the treatment of illness or injury, which accounts for 31.5% of the total visits. Maternal and child healthcare is the second most common reason 25.5% of the visits. People that visi for family planning services, routine check-ups, and health education and promotion make up are very minimal. This is also consistent with the results of a study conducted by Beatrice et al. (2024) on knowledge, attitudes, and misconceptions regarding tuberculosis among pulmonary patients with delayed access to healthcare in a high-burden TB state in Nigeria. The study found that most patients use conventional medicine as a last resort after exhausting all other options.

Figure 6 How can you rate the overall quality of services provided at the primary healthcare facility?
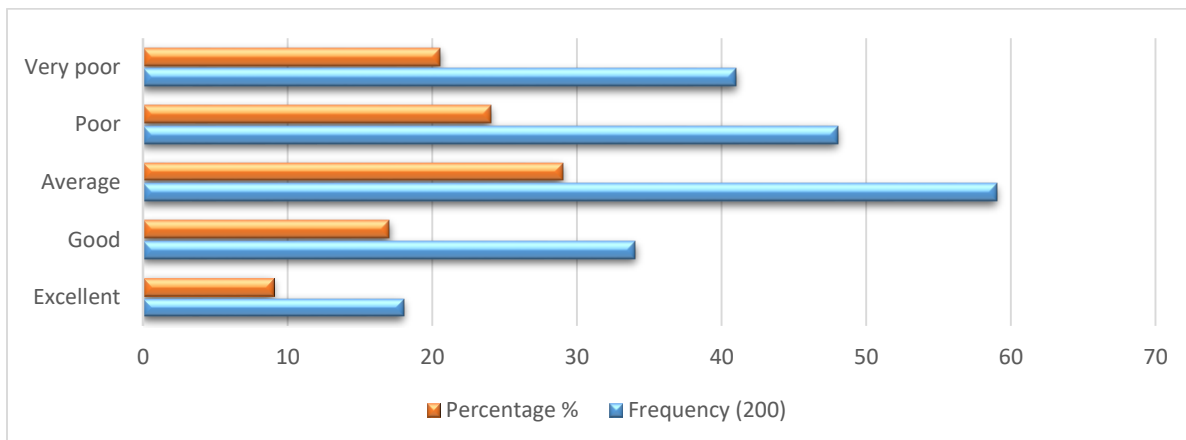
(**Source**: Field Survey, 2024)

According to the figure 6, the overall quality of services provided at the primary healthcare facility was rated as follows: the quality of service by primary health care with highest percentage (29%) is averagely rated, followed with poor 24% and very poor20%. This implies that the quality of service of primary health care in the study area is relatively poor and need improvement. The findings are similar to the findings of Singh and Dixt (2020) and Beatrice (2016), they found that user perceptions of service quality were influenced by factors such as availability of drugs, competence of staff, and cleanliness of facilities. The mixed ratings observed in the table could be indicative of variations in these quality-related factors. Also, Kidola (2022) found that satisfaction was higher among patients who perceived the overall quality of services as good or excellent, while those who rated the quality as poor or average were more likely to be dissatisfied. This aligns with the interpretation that the mixed ratings suggest room for improvement in service quality.

Figure 7 How can you rate the overall level of utilization of primary healthcare facilities within your community?
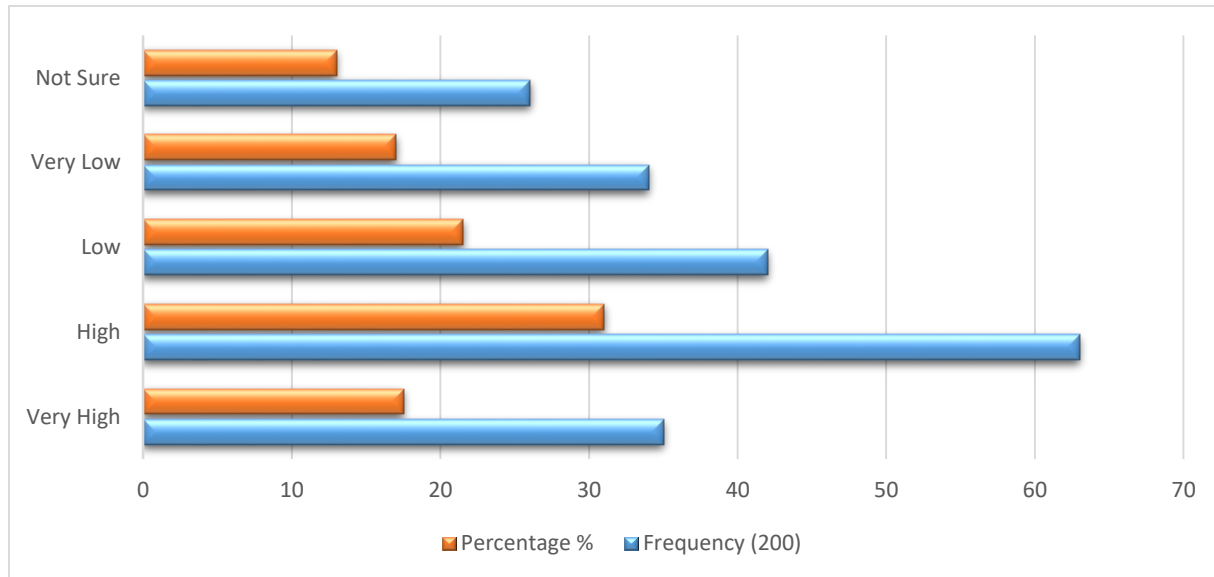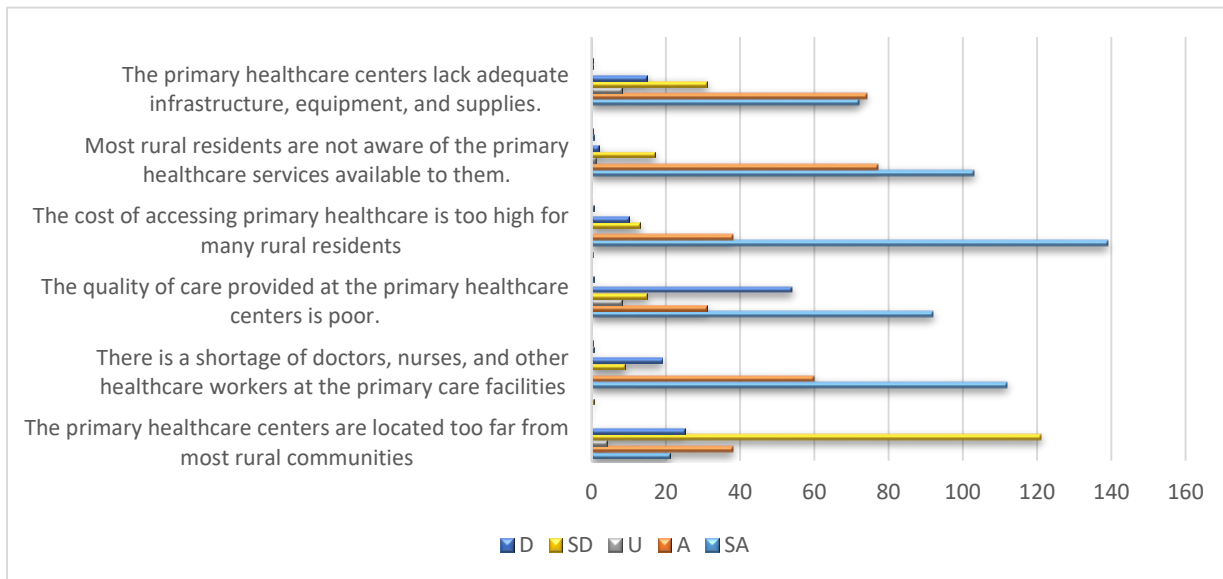

(**Source:** Field Survey, 2024)

Figure 7 revealed the overall level of utilization of primary healthcare facilities within the community. The largest percentage (31.0%) of respondents rated the utilization as "High", indicating that the majority of the community is utilizing the primary healthcare facilities at a high level. However, a significant proportion (21.5%) also rated the utilization as "Low", and the same percentage (17.5%) rate the utilization as very high and very low. This is suggesting that there is need for improvement in the overall utilization of these facilities within the community. Based on the findings, the community may need to develop targeted interventions or outreach programs to address the needs of the portions of the population reporting lower utilization of primary healthcare facilities. Studies have shown that high utilization of primary healthcare services is associated with

improved health outcomes, better disease management, and reduced healthcare costs at the population level. (Macinko et al., 2022). Research indicates that barriers to accessing primary care can include affordability, transportation, cultural/linguistic factors, health literacy, and availability of services. Identifying and addressing these barriers is crucial. (Beatrice & Olatunji,2020).

Figure 8 Challenges Affecting the Utilization of Primary Healthcare System in Rural Areas of Oye- Ekiti, LG
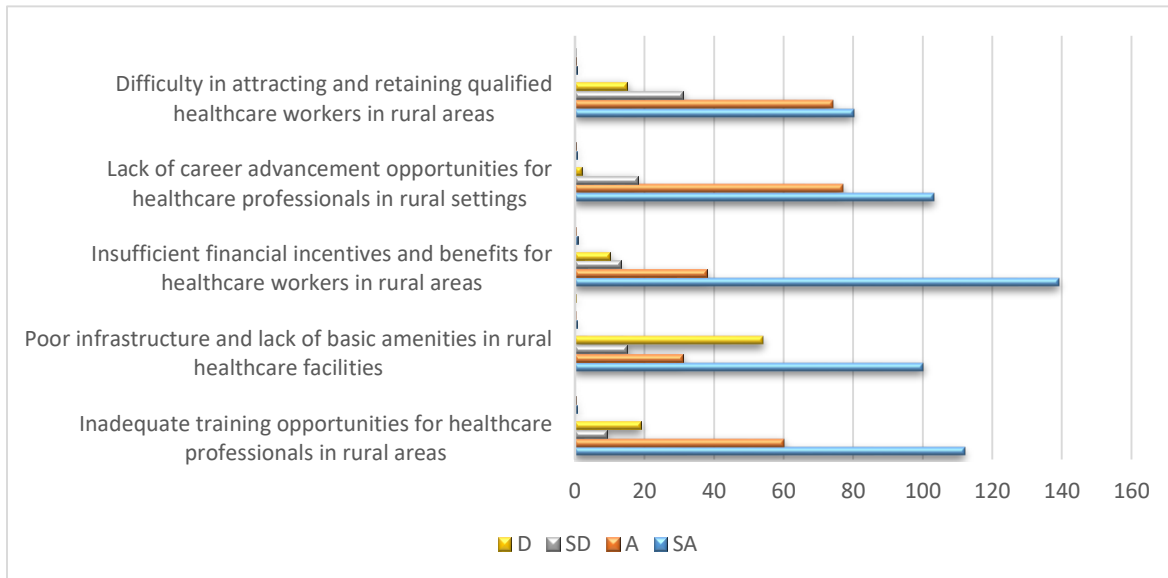

(**Source:** Field Survey, 2024)

Figure 8 revealed the key challenges affecting the utilization of the primary healthcare system in rural areas of Oye-Ekiti LG. The majority of respondents (60.5%) strongly disagreed that the primary healthcare centers are located too far from most rural communities. That means the challenges of utilization of primary health care is not location but other factors. A significant proportion of respondents (56.0%) strongly agreed that there is a shortage of doctors, nurses, and other healthcare workers at the primary care facilities. Most respondents (69.5%) strongly agreed that the cost of accessing primary healthcare is too high for many rural residents. Over half of the respondents (51.5%) strongly agreed that most rural residents are not aware of the primary healthcare services available to them. Nearly half of the respondents (46.0%) strongly agreed that the quality of care provided at the primary healthcare centers is poor. While there was more mixed response on this, a significant proportion of respondents (36.0% strongly agreed, 37.0% agreed) felt that the primary healthcare centers lack adequate infrastructure, equipment, and supplies.

In summary, the key challenges appear to be related to the affordability, lack of health personnel, quality of service, and resource availability of the primary healthcare system in the rural areas of oye-Ekiti LG.

Figure 9 Percentage Distribution of the Respondents on the Factors Hindering Efficient Health Workforce Development in Rural Areas of Oye-Eki LG
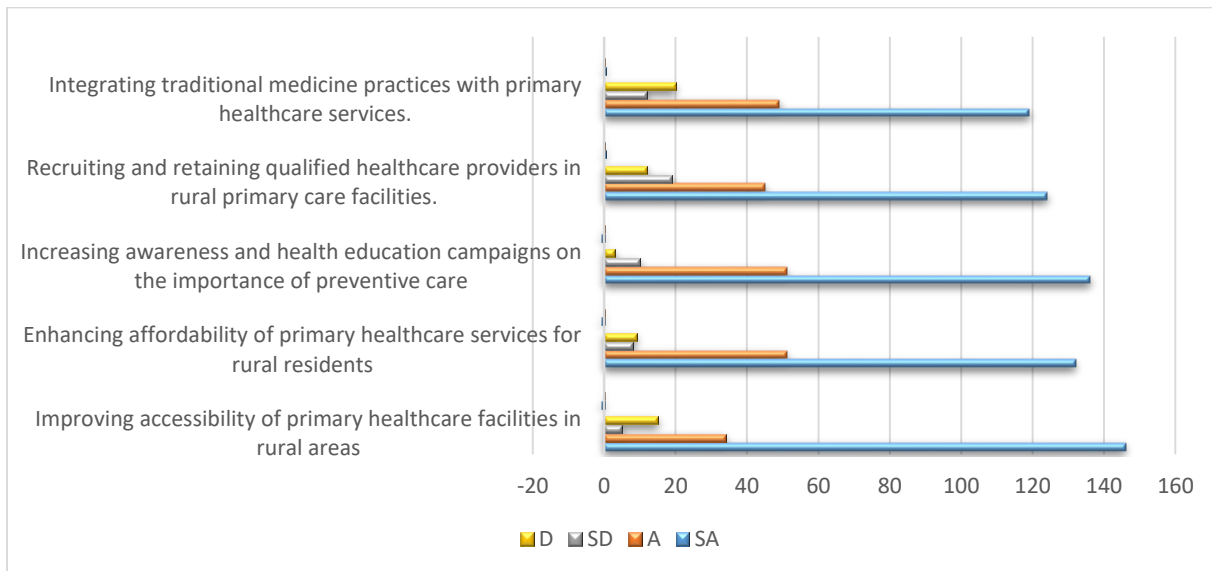

(**Source:** Field Survey, 2024)

Figure 9 is on the percentage distribution of the respondents on the factors hindering efficient health workforce development in Rural Areas of Ayegbaju Ekiti. The findings revealed that 56% of respondents strongly agreed to inadequate training opportunities for healthcare professionals in rural areas, this suggests that the lack of adequate training opportunities for healthcare workers is a significant issue in the rural areas of Oye-Ekiti LG. Improving access to training and professional development programs for healthcare professionals in rural settings could help address this challenge. 50% of respondents strongly agreed to poor infrastructure and lack of basic amenities in rural healthcare facilities. This indicates that the poor state of infrastructure and lack of basic amenities in rural healthcare facilities is a major obstacle to efficient health workforce development. Investing in the upgrading and maintenance of rural healthcare facilities, including the provision of essential infrastructure and amenities, could help improve the working conditions and attractiveness of these areas for healthcare professionals.69.5% of respondents strongly agreed to insufficient financial incentives and benefits for healthcare workers in rural areas. This suggests that the lack of competitive financial incentives and benefits for healthcare workers in rural areas is a significant deterrent to attracting and retaining qualified professionals. Implementing appropriate financial incentives, such as higher salaries, allowances, or other benefits, could help make rural healthcare positions more appealing and improve workforce retention.

Also, 51.5% of respondents strongly agreed to Lack of career advancement opportunities for healthcare professionals in rural settings. This indicates that the limited opportunities for career growth and development in rural areas are seen as a significant obstacle to efficient health workforce development. Providing clear paths for career advancement, such as training, mentorship programs, or leadership opportunities, could help attract and retain healthcare

professionals in rural settings. Furthermore, 40% of respondents strongly agreed to difficulty in attracting and retaining qualified healthcare workers in rural areas. This suggests that rural areas face significant challenges in attracting and keeping qualified healthcare professionals, which may be related to the other factors identified in the table. Addressing the root causes, such as improving training opportunities, infrastructure, incentives, and career advancement, could help make rural healthcare positions more attractive and improve workforce retention.

In summary, the findings revealed that a multi-pronged approach targeting these key factors could be effective in addressing the challenges of efficient health workforce development in the rural areas. Investing in training opportunities, infrastructure, financial incentives, and career advancement pathways may help make rural healthcare positions more appealing and improve the recruitment and retention of qualified healthcare professionals. The results are in line with those of Lehmann et al. (2020), who found that one of the biggest obstacles to hiring and keeping health professionals in rural and remote locations was a lack of chances for professional growth and training. Additionally, Grobler et al. (2022) stressed the need of giving rural health professionals access to chances for ongoing education and training in order to enhance their skills and abilities.

Figure 10 Measures and Strategies to Improve the Utilization of Primary Healthcare Services in Rural Areas of Oye Ekiti LG.

(**Source:** Field Survey, 2024)

Figure 10 is on the measures and Strategies to improve the utilization of primary healthcare services in rural areas. The findings revealed that 73% of respondents strongly agree that improving accessibility of primary healthcare facilities in rural areas is a key measure, 66% of respondents strongly agree that enhancing affordability of primary healthcare services is important, 68% strongly agree that increasing awareness and health education campaigns is a key strategy, 62% strongly agreed to recruiting and retaining qualified healthcare providers in rural primary care facilities, 59.5% strongly agree with integrating traditional medicine.

Overall, the data indicates strong support among respondents for measures to improve accessibility, affordability, awareness, staffing, and integration of traditional medicine in primary healthcare in rural areas of Ayegbaju Ekiti. The high percentages of strong agreement suggest these are seen as critical strategies by the survey participants.

5.0 DISCUSSION OF FINDINGS

The findings in figure 6 revealed that the commonest health challenges rural dwellers face which includes; malaria (73%) which is the most prevalent, followed by issues related to accidents and injuries 61% and maternal and child health 52%. This corroborated by the research RBM, (2005) that prompt access to effective malaria treatment is central to the success of malaria control worldwide. Also, the table revealed how often the respondents visit the primary healthcare facility in their community. The findings revealed that the most common frequency of visits to the primary healthcare facility is "Occasionally" at 43.0% followed by respondents (34%) that never visit primary health facility. This show poor patronage of primary health centre and this may also be the reason why medical personnel are not motivated. The finding corroborates the result from the study carried out by Adeoye et al (2020) on sociological inquiry into perception and health seeking behaviour of Tuberculosis in Oyo in which only 14.5% go to clinic/hospital for treatment while majority prefer self-medication and traditional/faith based. On the most common reason for visiting the Primary Healthcare Facility is for the treatment of illness or injury, which accounts for 31.5% of the total visits. Maternal and child healthcare is the second most common reason 25.5% of the visits. People that visi for family planning services, routine check-ups, and health education and promotion make up are very minimal. This is also in line with finding from the study carried out by Beatrice et al (2024) on insight, belief and myths surrounding tuberculosis among pulmonary patients with delayed healthcare access in a high-burden TB state in Nigeria in which it was revealed that majority take orthodox medicine as the last option after they have tried other alternatives. Furthermore, on overall level of utilization of primary healthcare facilities within the community. The largest percentage (31.0%) of respondents rated the utilization as "High", indicating that the majority of the community is utilizing the primary healthcare facilities at a high level. However, a significant proportion (21.5%) also rated the utilization as "Low", and the same percentage (17.5%) rate the utilization as very high and very low. This is suggesting that there is need for improvement in the overall utilization of these facilities within the community. Based on the findings, the community may need to develop targeted interventions or outreach programs to address the needs of the portions of the population reporting lower utilization of primary healthcare facilities. Studies have shown that high utilization of primary healthcare services is associated with improved health outcomes, better disease management, and reduced healthcare costs at the population level. (Macinko et al., 2022). Moreso, on the key challenges affecting the utilization of the primary healthcare system in rural areas of Oye-Ekiti LG. The majority of respondents (60.5%) strongly disagreed that the primary healthcare centers are located too far from most rural communities. This is also corroborated by the research of Pourreza et al. (2009) in Tehran, Iran that Health care-seeking behaviour in Tehran is affected by numerous challenges.

In conclusion, on the measures and Strategies to improve the utilization of primary healthcare services in rural areas. The findings revealed that 73% of respondents strongly agree that

improving accessibility of primary healthcare facilities in rural areas is a key measure, 66% of respondents strongly agree that enhancing affordability of primary healthcare services is important, 68% strongly agree that increasing awareness and health education campaigns is a key strategy, 62% strongly agreed to recruiting and retaining qualified healthcare providers in rural primary care facilities, 59.5% strongly agree with integrating traditional medicine. This is corroborated by study by Ehiri (2005), who claims that better resources and low-cost, cost-effective interventions that target the service delivery process—like supervision—have increased the quality and utilisation of basic health care in Nigeria.

6.0 CONCLUSION

Without dispute, the data indicates that malaria is the most prevalent health issue that rural residents deal with. The tepid attitude of rural residents towards primary health centres, which is caused by the non-proximity of primary health centres, budgetary restrictions, preference for traditional medicine, and scarcity of competent medical professionals, contributes to the malaria threat in rural regions. Rural residents must have inexpensive and easy access to primary health centres in order to increase the use of primary healthcare.

7.0 RECOMMENDATIONS

Based on the findings of this research the following recommendations are made:

1. Decreased out-of-pocket cost by subsidising healthcare services, thus rendering them accessible to economically disadvantaged rural inhabitants.
2. Ensure adequate staffing levels of healthcare workers at PHC facilities, particularly in rural areas. Deploy more doctors, nurses, and community health workers to address the shortage of qualified personnel.
3. Ensure that health facilities are located within reasonable distances to rural populations. Construct more PHC centers to reduce the burden of long-distance travel, which is often a barrier to utilization

REFERENCES

Adeoye, B. D. (2015). Demographic characteristics as determinants of the use of health care services: A case of Nsukka, Southeast Nigeria. Open Journal of Social Sciences, 3(12), 23–28.

Adeoye, B. D. (2016). Socio-cultural factors in the use of health Care services in nsukka town [PhD Thesis].

Adeoye,B.D , Adebayo,A A, Olaogun J.A & Oriola B (2020). Sociological Inquiry into Perception and Health Seeking Behaviour of Tubaculosis in Oyo State, Nigeria. Journal of Gender and Behaviour18 (3) Pg 16452-16467

Ajayi, K. V., Olowolaju, S., Wada, Y. H., Panjwani, S., Ahinkorah, B., Seidu, A.-A., Adu, C., Tunji-Adepoju, O., & Bolarinwa, O. A. (2023). A multi-level analysis of prevalence and

factors associated with caesarean section in Nigeria. PLOS Global Public Health, 3(6), e0000688.

Atobatele, S., Omeje, O., Ayodeji, O., Oisagbai, F., & Sampson, S. (2022). Situational Analysis of Access to Essential Healthcare Services in Nigeria: Implication for Trans-Sectorial Policy Considerations in Addressing Health Inequities. Health, 14(5), 553–575.

Bain, L. E., Aboagye, R. G., Dowou, R. K., Kongnyuy, E. J., Memiah, P., & Amu, H. (2022). Prevalence and determinants of maternal healthcare utilisation among young women in sub-Saharan Africa: Cross-sectional analyses of demographic and health survey data. BMC Public Health, 22(1), 647. https://doi.org/10.1186/s12889-022-13037-8

Balogun, J. A. (2021). The Vulnerabilities of the Nigerian Healthcare System. In J. A. Balogun, The Nigerian Healthcare System (pp. 117–152). Springer International Publishing. https://doi.org/10.1007/978-3-030-88863-3_5

Beatrice, D. Adeoye., Michael, T. O., & Agbana, R. D. (2024). Insights, beliefs, and myths surrounding tuberculosis among pulmonary patients with delayed healthcare access in a high-burden TB state in Nigeria–a qualitative inquiry. Frontiers in Sociology, 9, 1378586.

Beatrice D Adeoye (PhD) & Oriola B & Adeyemi E Odedokun (PhD) & Olutayo A Adebayo (2021). Intercultural Belief and Practice of Female Genital Mutilation in Kaduna and Ekiti States, Nigeria.. Gender & Behaviour19 (3) December 2021. Pg18450-18458

Beatrice D Adeoye (PhD) & Olatunji O Ajoke PhD (2020). Awareness and Knowledge about Family Planning and Reproductive Health: A Descriptive Study Among Some Selected Men in Ado-Ekiti, Ekiti State, Nigeria. Gender & Behaviour18 (3)Pg 16104-16109

Cheng, X.-P., Wang, X.-W., Sun, H.-F., Xu, L., Olatunji, O. J., Li, Y., Lin, J.-T., & Zuo, J. (2023). NAMPT/SIRT1 Expression Levels in White Blood Cells Differentiate the Different Rheumatoid Arthritis Subsets: An Inspiration from Traditional Chinese Medicine. Journal of Inflammation Research, Volume 16, 4271–4285. https://doi.org/10.2147/JIR.S431600

Effiong, J. B., & Aya, C. F. (2022). Rural-urban migration among women farmers: Science education, survey, and implication for food crop production in Cross River State, Nigeria. Indonesian Journal of Teaching in Science, 2(1), 75–80.

Ehiri JE, Oyo-Ita AE, Anyanwu EC, Meremikwu MM, Ikpeme MB (2005). Quality of child health services in primary health care facilities in south-east Nigeria. Child Care Health Dev., 31(2): 181- 91.

Ekenna, A., Itanyi, I. U., Nwokoro, U., Hirschhorn, L. R., & Uzochukwu, B. (2020). How ready is the system to deliver primary healthcare? Results of a primary health facility assessment in Enugu State, Nigeria. Health Policy and Planning, 35(Supplement_1), i97–i106.

Grobler, C., van Tongeren, M., Gettemans, J., Kell, D. B., & Pretorius, E. (2023). Alzheimer's disease: A systems view provides a unifying explanation of its development. Journal of Alzheimer's disease, 91(1), 43–70.

Hamid, A. M., & Sule, G. M. (2021). Media campaign exposure and HIV/AIDS prevention: 1980–2020. In AIDS Updates-Recent Advances and New Perspectives. IntechOpen. https://www.intechopen.com/chapters/75675

Kidola, M. K. (2022). The Effects of Service Quality on Customer Satisfaction: A Case of National Health Insurance Fund (NHIF)-Kibondo District, Kigoma Region. [PhD Thesis, The Open University of Tanzania]. http://repository.out.ac.tz/id/eprint/3615

Li, X., Krumholz, H. M., Yip, W., Cheng, K. K., De Maeseneer, J., Meng, Q., Mossialos, E., Li, C., Lu, J., & Su, M. (2020). Quality of primary health care in China: Challenges and recommendations. The Lancet, 395(10239), 1802–1812.

Macinko, J., & Mullachery, P. H. (2022). Primary care experiences among Brazilian adults: Cross-sectional evidence from the 2019 National Health Survey. PloS One, 17(6), e0269686.

Morison, J. K. (2023). Factors Influencing The Retention Of Primary Healthcare Workers In Rural Sierra Leone: Literature Review. Https://Bibalex.Org/Baifa/Attachment/Documents/4hdy6uy06z_20231123113637348.Pdf

Nkukpornu, A. (2015). Social Marketing: Using the Health Belief Model for the Prevention of Cholera in Ghana [PhD Thesis, University of Ghana]. https://ugspace.ug.edu.gh/items/2e71e121-fd71-43b0-9c45-621104623a1d

Núñez, A., Sreeganga, S. D., & Ramaprasad, A. (2021). Access to Healthcare during COVID-19. International Journal of Environmental Research and Public Health, 18(6), 2980.

Pourreza A, Khabiri R, Arab M, Akbari Sari A, Rahimi A, Toll A. Health care-seeking behavior in Tehran: Iran and factors affecting it. SLSPH. 2009;7(2):1. Persian

RBM: Global Strategic Plan: Roll Back Malaria 2005-2015. Geneva: Roll Back Malaria Partnership; 2005.

Singh, D., & Dixit, K. (2020). Measuring perceived service quality in healthcare setting in developing countries: A review for enhancing managerial decision-making. Journal of Health Management, 22(3), 472–489.

Wang, Y., Li, Y., Qin, S., Kong, Y., Yu, X., Guo, K., & Meng, J. (2020). The disequilibrium in the distribution of the primary health workforce among eight economic regions and between rural and urban areas in China. International Journal for Equity in Health, 19(1), 28. https://doi.org/10.1186/s12939-020-1139-3