

International Journal of Health Sciences (IJHS)

**Enablers/ Barriers of Primary Eye Care Utilization in Primary
Healthcare Facilities in Rivers State**



CARI
Journals

Enablers/ Barriers of Primary Eye Care Utilization in Primary Healthcare Facilities in Rivers State

¹Siyeofori Dede,  ^{1*}Pearl Abereton, ²Adaeze Chidinma Oreh

¹Director, Health Planning, Research and Statistics, Rivers State Primary Health Care Management Board

¹Head, Learning and Professional Development, Rivers State Primary Health Care Management Board

²27th Commissioner for Health, Rivers State Ministry of Health

<https://orcid.org/0000-0002-0826-0902>

Accepted: 19th March, 2026, Received in Revised Form: 31st March, 2026, Published: 7th April, 2026

Abstract

Purpose: This study was thus aimed at assessing the enablers, and barriers affecting the utilization of these services among persons receiving care at PHCs in Rivers State.

Methodology: A descriptive design was employed, and was conducted among 356 clients of PHC facilities in Rivers State, Nigeria. Data was collected using interviewer-administered questionnaires to identify enablers and barriers affecting the use of PEC services in the State. Data analysis was done using the Microsoft Excel spreadsheet and was presented on tables and charts.

Findings: Enablers of the use of PEC services included good proximity 180 (50.6%) and accessibility of the services 185 (52.0%), as well as good interpersonal relationship with the healthcare workers 201 (56.5%) among others. Barriers to the use of the services however included poor service availability 232 (65.2%) and quality 205 (57.6%), long waiting time 210 (59.0%) and lack of trust in screening services provided 196 (55.1%).

Unique Contribution to theory, practice and policy: Enablers of service utilization included good service accessibility as well as good interpersonal relationship with health workers, while barriers included poor service quality among others. Urgent interventions must be put in place to close this inequity gap in the accessibility of PEC services by the relevant government ministries and agencies.

Keywords: *Primary eye care (PEC), PEC utilization, Enablers, Barriers, PHC*

1.0 INTRODUCTION

Most eye care services are being delivered through general, and teaching hospitals, or in private and specialist hospitals, which are not as proximal to individuals and the community as the primary level of healthcare services (Izquierdo, 2022). This poses a problem of hindering initial access to Primary Eye Care (PEC) services and could compound the problem of visual impairment. A key approach to improving access to these services and strengthening service delivery at all levels of care is the incorporation of eye care into Primary Health Care (PHC) (Burn et al., 2020; Yasmin & Schmidt, 2022). To forestall this, a Global Action Plan was put in place by the World Health Organization (WHO) which emphasizes strengthening PEC as an approach to achieving Universal Eye Health Coverage (UEHC) (WHO, 2018; Khanna et al., 2020). The UEHC ensures that all people have unfettered access to promotive, preventive, curative and rehabilitative visual healthcare services, of sufficient quality to be effective, while also ensuring that people do not suffer financial hardship when paying for the services” (WHO., 2018). Providing eye care services that are easily accessible and affordable ensures that a large proportion of the populace receive the care for ocular health and wellbeing which has become a necessity in the present day (Yasmin & Schmidt, 2022). PEC is an essential component of comprehensive eye care which is targeted toward preventing blindness and visual impairment (VI) as well as providing services to address ocular morbidities (Yasmin & Schmidt, 2022). It is a frontline activity, which involves the provision of care and identifying ocular diseases before it has the opportunity to degenerate. It comprises eye health education and promotion, history taking, examination, screening and diagnosis, and also prompt referral (Anyiam et al., 2017; Yasmin & Schmidt, 2022).

In Nigeria, visual morbidities are still a problem occurring among the Nigerian populace (Anyiam et al., 2017; Moyegbone et al., 2020; Eze et al., 2024), with 84% of cases of blindness reported in the Nigeria National Blindness and Visual Impairment Survey, as being avoidable (Abdull et al., 2009). These persistent prevalence of ocular diseases could be related with the prevailing barriers affecting the provision and utilization of these services. These include poor access to services, insufficient manpower, technical and infrastructural resources to provide these services, direct and indirect costs of care, poor knowledge of visual morbidities as well as where to receive appropriate visual healthcare, among others (Anyiam et al., 2017; Sengo et al., 2022). There is thus the need to improve the accessibility and quality of primary eye care in Nigeria with the focus of improving the visual health indices and ocular well-being of a populace. In Rivers State, Nigeria, there are scant published studies assessing enablers and barriers facing the optimal utilization of PEC services in PHC facilities. Considering that ocular morbidities are still a source of public health concern (Tafida et al., 2015; Anyiam et al., 2017; Chukwuka et al., 2017; Chinawa et al., 2020) and the potential of using identified enablers and barriers to improve the provision of PEC services in the State, there is thus the need to conduct this study. This study thus aimed at assessing the enablers, and barriers affecting the utilization of PEC services among persons receiving care at PHC facilities in Rivers State.

2.0 METHODOLOGY

This study utilized a descriptive design to determine the enablers and barriers affecting the utilization of PEC services at Model PHC facilities and Comprehensive PHC facilities located in the 23 Local Government Areas of Rivers State, Nigeria. A sample size of 384 was calculated using the Cochrane's formula for sample size determination using a prevalence value of 50%. [15] Responses were elicited from all willing respondents using a self-administered adapted questionnaire. Assessment of the respondents' perception of the enablers and barriers of PEC service utilization was done using a 15-item questionnaire with responses: "Strongly Agree", "Agree", "Undecided", "Disagree", and "Strongly Disagree". After seeking their consent alongside other ethical considerations for the research, the instrument was administered to the clients as they presented for clinical consultations at the PHC facilities.

Ethics Approval was obtained for this study from the Health Research Ethics Committee of the Rivers State Hospital Management Board (Approval number: RSHMB/RSHREC/2024/012). Permission to carry out the evaluation was obtained from the Executive Secretary and Director Planning, Research and Statistics of the Rivers State Primary Health Care Management Board (RSPHCMB) as well as the Medical-Officers-of-Health and facility heads of the various PHC facilities in Rivers State. Informed consent was also obtained from each respondent before conducting interviews and surveys. Also, the data collection tools were anonymised to ensure protection of the privacy of respondents and confidentiality of their responses.

Data was collected electronically and safely stored in a secure server of the Kobo toolbox Open-Source Mobile Data Collection platform. Data was cleaned, collated and analysed on a Microsoft Excel spreadsheet, was expressed as frequencies/percentages and Mean \pm S.D., and was presented on tables and charts. Regarding the perceived enablers and barriers encountered in utilizing PEC services among the PHC clients, having a majority of "Strongly agree" and "Agree" responses to positively-directed statements e.g. "The time required to reach the health centre is appropriate", as well as having a majority of "Strongly disagree" and "Disagree" responses to negatively-directed statements e.g., "cost is a serious barrier to using PEC services" implied that the statement was an enabler. Encountering the reverse implied that the statement was a barrier. These were then colour-coded as green (for enablers) and red (for barriers).

3.0 RESULTS

The table below shows the number of participants that responded accurately to the questions in the data tool.

Table 1: Response Rate

Response	Frequency	Percent
Returned	356	92.7%
Unreturned	28	7.3%
Total	384	100%

In this study 356 respondents accurately responded to the 384 distributed study instruments, giving a response rate of 92.7% as shown in Table 1 above.

3.1 Sociodemographic characteristics of PHC clients

The figure below represents the socio-demographic characteristics of respondents

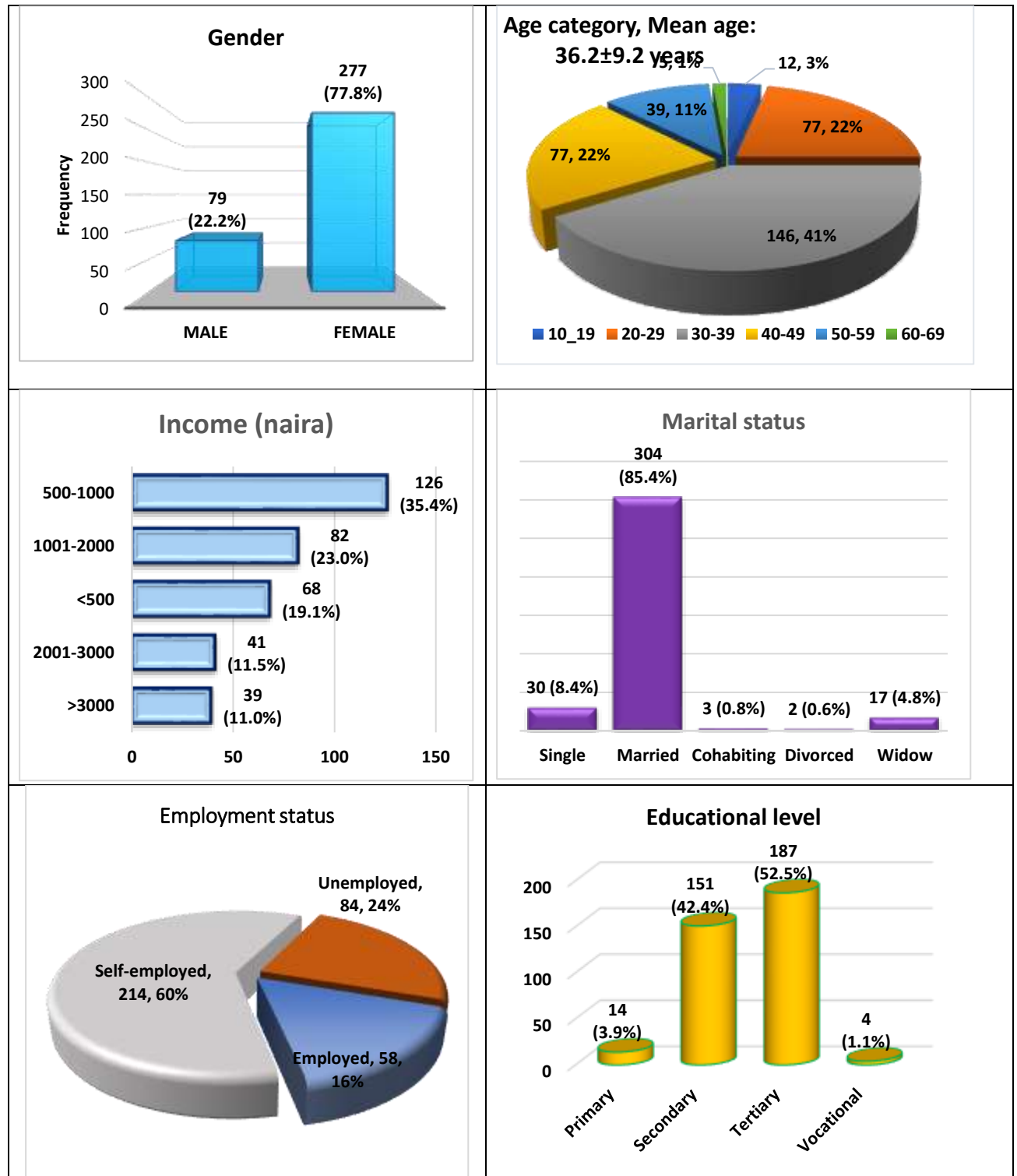


Figure 1: Sociodemographic characteristics of PHC clients

Females formed the major part of the study population 277 (77.8%), aged between 30 and 39 years 146 (41.0%), had a daily income range of between 500 and 1000 naira 126 (35.4%), were married 304 (85.4%), self-employed 214 (60.0%) and had received tertiary education 187 (52.5%), as shown in Figure 1 above.

3.2 Barriers and Enablers of PEC Services Utilization

Table 2 below represents the barriers and enablers of PEC utilization in PHC facilities in Rivers State.

Table 2: Barriers and Enablers of Utilization of PEC Services

QUESTIONS	SA	A	UN	D
PEC services are readily provided at the health centre	31	93	85	147
The distance between my house and the health centre is appropriate	35	145	76	100
The time needed to get to the health centre is reasonable	33	150	84	89
It is easy for me to get to and from the health centre	39	146	83	88
The health centre's facilities adequately address the patients' needs for PEC	51	120	97	88
The health staff is adequate for the number of clients and their needs for PEC	52	127	101	76
The quality of PEC services provided in the health centre is acceptable	38	113	116	89
The health workers pay great attention to what I have to say regarding my eyes	71	130	100	55
I am given enough time to describe my eye problem	72	131	102	51
I have confidence in the statement made by the management team	81	134	87	54
I accept PEC screening services provided at the health centres	56	104	118	78
The treatment team at the health centre is respectful	88	138	89	41
Cost is a major barrier to using PEC services	44	105	109	98
The expected time to receive the PEC services I need is appropriate	36	110	135	75
The working hours of the PHC facility are suitable for receiving PEC services	79	126	109	42
The physical space of the health centre is suitable for receiving PEC services	84	142	97	33
The education that is given to me is understandable	98	120	98	40
The information is expressed in simple language without the use of specialized words	110	114	96	36
The communication between health workers (doctors and midwives) and clients is effective.	86	138	94	38
My understanding of the medical information provided to me is very important to the healthworkers.	93	136	86	41
My living conditions (that is, my socio-economic status) are taken into account	97	108	104	47

KEY

	Barriers		Enablers		Indecision
--	----------	--	----------	--	------------

SA= Strongly Agree; A= Agree; UN = Undecided; D = Disagree

Concerning the barriers and enablers affecting the utilization of PEC services among the respondents, it was found that altogether, 15 enablers, and 4 barriers existed which affected the utilization of PEC services among the PHC clients as shown in Table 2.

Enablers of the use of PEC services as identified in this study included good proximity 180 (50.6%) and accessibility of the services 185 (52.0%), as well as good interpersonal relationship with the healthcare workers 201 (56.5%), among others as shown in Table 2.

Barriers to the use of the services however included poor service availability 232 (65.2%) and poor quality 205 (57.6%), long waiting time 210 (59.0%) and lack of trust in screening services provided 196 (55.1%) as shown in Table 2.

4.0 DISCUSSION

The quality of care rendered in any health facility affects the utilization of these health facilities. The utilization of any health care service is also influenced by several factors. These may be enabling factors and barriers or limiting factors. In this study, factors that enabled the utilization of PEC services in PHC facilities included proximity to their houses, good accessibility, good interpersonal relationships with the healthcare workers, trust in the advice provided by the healthcare workers among others. Respondents in this study also revealed that barriers to PEC services utilization majorly was the unavailability of these services in most of the PHC facilities; and where they were available, the services were graded as being of poor quality. Other barriers included the lack of trust in the screening service provided, as well as having to wait for too long to receive care. This finding reconfirms a fundamental dynamic in health services: *access without acceptable quality yields limited health impact*, and conversely, quality without effective access fails to reach populations who need care. Framing this duality is critical for policymakers and implementers who aim to increase PEC coverage through PHC platforms and thereby contribute to broader goals such as Universal Health Coverage (UHC) and reduction of avoidable visual impairment. It exposes a cascade of systemic weaknesses and opportunities. This finding also implies that preventable eye conditions will persist, disproportionately affecting the most vulnerable who depend on nearby services. This is in line with the findings of other authors in this regard where poor availability of PEC services (Moyegbone et al., 2020), especially in rural areas (Ntsoane & Oduntan, 2010), as well as long waiting time (Jolley et al., 2017), have been reported as barriers to utilizing these services. Poor quality of services, including poor previous experiences, having to spend long periods before they are attended to, perceived incompetency of the healthcare workers and so on, can deter individuals from seeking the necessary healthcare they need (Jolley et al., 2017; Sengo et al., 2022). Long waiting times further discourage utilization of PEC services, especially for individuals with busy schedules or those who require urgent healthcare attention, contributing to delays in diagnosis and treatment (Sengo et al., 2022).

It is important to point out that when PEC services are available and easily accessible, utilization of such services is high considering that the patients do not have to spend more time and resources in seeking such care from farther locations. This is especially advantageous for persons residing in rural communities, thus reducing the problems of health inequity (Ntsoane

& Oduntan, 2010; Jolley et al., 2017). When the services are also easily accessible, equipped with the necessary resources, and have convenient operating periods run by healthcare workers who provide patient-centre care, the populace is always assured of receiving timely, and effective quality eye care (Ntsoane & Oduntan, 2010; Sengo et al., 2022). This inadvertently promotes prompt diagnosis and treatment of ocular morbidities, reduction in associated health complications and enhancement of optimal public health (Olawoye et al., 2020). It is essential that identified enabling factors of PEC services utilization are enhanced and effectively integrated into healthcare planning and policy mechanisms of concerned stakeholders. This ensures increased utilization of PEC services, improved patient outcomes as well as a more robust and responsive healthcare system.

This study addresses a relevant topic about a critical gap in PEC utilization and aligns well with WHO recommendations and world report on vision. It incorporates users' perspective which is a substantive strength for understanding real barriers, and delivers clear, actionable evidence about drivers of PEC utilization. While this study has a strong public health impact as discussion links the findings to preventable blindness and universal eye health coverage across PHC facilities, it was however, limited, because it relied on perceived measures which is subject to reporting bias. It was also purely descriptive in nature. Reasons being that this study was an assessment of the baseline state of the PHC facilities. We therefore recommend future studies to incorporate the inferential component in the statistical analyses. Future research should also embed objective performance indicators and track referral completion and patient outcomes over time.

5.0 CONCLUSION

This study thus concludes that enablers of the utilization of PEC services included the proximity, accessibility, good interpersonal relationships with the healthcare workers, trust in the advice provided by the healthcare workers among others. Barriers however included that PEC services not being readily available at the PHC facility; poor quality services in PHC facilities providing such services, long waiting time and lack of trust in some services provided. This study's finding is a clarion call: improving PEC utilisation requires integrated action on availability, technical quality, patient experience, and operational efficiency.

It was thus recommended that:

Policymakers and programme managers must treat proximity and interpersonal trust as assets to be amplified while decisively addressing the supply-side failures—unavailability, poor technical screening, and long wait times—that currently repel users. Practical steps include immediate replenishment of basic PEC equipment and consumables, targeted training with supervision and quality assurance, reconfiguration of patient flows to reduce waiting, and community co-design of demand-generation strategies. Over the medium term, institutionalizing PEC competencies within PHC curricula, strengthening referral networks, and embedding quality metrics into routine systems will transform short-term gains into sustainable population health impact.

Author Contributions: S.D. was responsible for drafting the initial version of the manuscript and played a role in gathering data, designing the study, and interpreting the findings. P.A. assisted in interpreting the findings. A.O. managed the study, contributing to its design, data collection, and analysis of the results. Every author participated in reviewing and providing feedback on the manuscript. All authors have reviewed and consented to the final published version of the manuscript.

Funding: The fieldwork for this research did not receive any funding from funding agency, public or private sectors.

Acknowledgment: The authors wish to thank Benson Ephraim-Emmanuel, for his advice and technical assistance.

Conflicts of Interest: The authors declare no conflict of interest.

REFERENCES

- Abdull, M. M., Sivasubramaniam, S., Murthy, G. V., Gilbert, C., Abubakar, T., Ezelum, C., & Rabi, M. M. (2009). Causes of blindness and visual impairment in Nigeria: the Nigeria national blindness and visual impairment survey. *Investigative ophthalmology & visual science*, 50(9), 4114-4120.
- Anyiam, F. E., Chinawa, N. E., Nathaniel, G. I., & Wajuihian, S. O. (2017). Preliminary findings of ocular morbidity in participants attending ophthalmic outreach services in rural Nigeria. *Niger Del Med*, 2, 13-8.
- Burn, H., Puri, L., Roshan, A., Singh, S. K., & Burton, M. J. (2020). Primary eye care in eastern Nepal. *Ophthalmic epidemiology*, 27(3), 165-176.
- Chinawa, N. E., Odogu, V. K., Ezeh, E. I., & Anyiam, F. E. (2020). ocular morbidity pattern and presentation among residence of a semi-urban community in Rivers State, Nigeria. *Asian Journal of Medicine and Health*, 18(8), 14-20.
- Chukwuka, I. O., Chinawa, E. N., & Ejele, I. O. (2017). Ocular morbidity pattern in Abonnema, Akuku-Toru local government area of Rivers state. *Annals of Biomedical Sciences*, 16(2), 217-230.
- Eze, U. A., Obasuyi, O. C., Salihu, D. V., Bature, M., Yeye-Agba, O. O., & Kanmodi, K. K. (2024). Prevalence and causes of blindness and visual impairment among Nigerian children: a systematic review. *Clinical Ophthalmology*, 289-301.
- Izquierdo, I. (2022). Barriers to accessing eye health services in suburban communities in Nampula, Mozambique. *International Journal of Environmental Research and Public Health*, 19(7), 3916.
- Jolley, E., Mafwiri, M., Hunter, J., & Schmidt, E. (2017). Integration of eye health into primary care services in Tanzania: a qualitative investigation of experiences in two districts. *BMC Health Services Research*, 17(1), 823.

- Khanna, R. C., Sabherwal, S., Sil, A., Gowth, M., Dole, K., Kuyyadiyil, S., & Chase, H. (2020). Primary eye care in India–The vision center model. *Indian journal of ophthalmology*, 68(2), 333-339.
- Moyegbone, J. E., Nwose, E. U., Anowa, E. I., Clarke, A., Odoko, J. O., & Agege, E. A. (2020). Prevalence of Visual Impairment among Primary and Secondary School Children in Delta State, Nigeria. *World Health*, 7(10), 4171-4179.
- Moyegbone, J. E., Nwose, E. U., Nwajei, S. D., Agege, E. A., Odoko, J. O., & Igumbor, E. O. (2020). Integration of eye care into primary healthcare tier in Nigeria health system: A case for Delta State. *Clinical Medical Reviews and Reports*, 3(2), 1-6.
- Ntsoane, M. D., & Oduntan, O. A. (2010). A review of factors influencing the utilization of eye care services. *African Vision and Eye Health*, 69(4), 182-192.
- Sengo, D. B., Marraca, N. A., Muaprato, A. M., García-Sanjuan, S., Caballero, P., & López-Izquierdo, I. (2022). Barriers to accessing eye health services in suburban communities in Nampula, Mozambique. *International Journal of Environmental Research and Public Health*, 19(7), 3916.
- Tafida, A., Kyari, F., Abdull, M. M., Sivasubramaniam, S., Murthy, G. V. S., Kana, I., ... & Nigeria National Survey of Blindness and Visual Impairment Study Group. (2015). Poverty and blindness in Nigeria: results from the national survey of blindness and visual impairment. *Ophthalmic epidemiology*, 22(5), 333-341.
- Olawoye, O., Fawole, O., & Ashaye, A. (2020). Eye Care Practices, Knowledge and Attitude of Glaucoma Patients at Community Eye Screening Outreaches in Nigeria.
- Yasmin, S., & Schmidt, E. (2022). Primary eye care: opportunities for health system strengthening and improved access to services. *International Health*, 14(Supplement_1), i37-i40.
- World Health Organization. (2018). *A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals* (No. WHO/HIS/SDS/2018.15). World Health Organization.

