CHALLENGES OF COMMUNITY-BASED SCREENING OF HEALTH AND DISEASES IN AFRICA: A NARRATIVE REVIEW

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ABSTRACT

Background: **Health outcomes in many African countries are shaped by poverty, inadequate sanitation, changing disease patterns, late presentation, and limited access to screening, contributing to delayed diagnosis of both communicable and non-communicable diseases. This narrative review synthesised evidence on the challenges affecting community-based health and disease screening in Africa, examined their implications for programme effectiveness, and identified strategies for strengthening screening and linkage to care.**

Method: **A narrative review of peer-reviewed articles and relevant reports was conducted using PubMed and Scopus. Studies addressing community-based screening for communicable and non-communicable diseases in African populations were included, and findings were synthesised thematically around screening approaches, implementation barriers, programme consequences, and strategies for strengthening screening and linkage to care.**

Results: **The reviewed literature covered communicable and non-communicable disease screening across several African countries. Key challenges included low awareness, financial and infrastructural limitations, sociocultural and religious barriers, poor accessibility, inadequate follow-up, and socioeconomic constraints. Reported strategies to address these issues included targeted health education, mobile clinics, digital technologies for communication and follow-up, Non-Governmental Organisation (NGO) participations, and sustained government commitment to strengthen equitable screening programs. Future research should focus on developing and evaluating scalable, integrated, technology-enabled community screening models that address context-specific barriers, strengthen linkage to care and long-term follow-up, and generate evidence on implementation effectiveness, equity, sustainability, and cost-effectiveness in low-resource settings.**

Conclusion: **Community-based screening remains an important approach for extending early detection and preventive services to underserved populations in Africa. Persistent challenges such as limited awareness, resource constraints, sociocultural barriers, and poor follow-up continue to hinder effectiveness. Future programs should emphasize sustainable strategies, leveraging technology, community engagement, and strong policy commitment to ensure equitable and long-term impact.**

Keywords: Screening, Community, Health, Disease screening, Barriers, Technology, Equity.

INTRODUCTION

Health is a fundamental state of well-being that every individual in a community strives to attain. However, in many developing countries like Nigeria, achieving this goal remain challenging. The quality of life for citizens is affected by numerous diseases caused by factors such as poverty, poor hygiene, inadequate screening, and changes in the epidemiology of these diseases.[1,2] These diseases are predominantly classified

as communicable and non-communicable, and many patients are diagnosed at a late stage due to a lack of awareness about early symptoms, poor health-seeking behavior, and an inability to afford available healthcare services.[2,3] Screening is the presumptive identification of unrecognised disease or defects by the application of tests, examinations, or other procedures that can be applied rapidly. Screening tests sort out apparently healthy persons who probably have a disease from those who probably do not. Screening is not intended to be diagnostic but to identify individuals who should undergo further testing or diagnosis[4]. It therefore plays a crucial role in ensuring early diagnosis and proper management before complications arise. This proactive approach is more cost-effective in alleviating the disease burden in low- and middle-income countries (LMICs), Africa inclusive.[4]

Communicable diseases, as infectious illnesses are predominantly linked to poor hygiene, substandard living conditions, risky sexual behaviors, and the improper use of antibiotics. These include diseases like hepatitis, human immunodeficiency virus infection (HIV), tuberculosis (TB), leprosy, and malaria.[5] Non-communicable diseases (NCDs), on the other hand, have become more common due to the adoption of western lifestyles, with conditions such as diabetes mellitus, hypertension, obesity, arthritis, peptic ulcer disease, and various cancers, including colorectal, breast, and cervical cancer now prevalent.[3,5] Both types of diseases have early and late stages, and early diagnosis is crucial for effective management. However, most patients tend to seek medical help only at the later stages, making successful treatment more challenging. As a result, disease screening is strongly recommended for the general population within the community.[6] For diseases to be appropriately screened and the screening to be beneficial to the people in the community, the disease should have a significant impact on health (high prevalence, serious consequences, etc.), should be recognisable at an early phase when intervention is more effective, and the natural history of the disease must be known. Effective treatment must be available, especially when given at the early stage of the disease, and lastly the disease must have a long preclinical phase to allow for intervention.[7]

This narrative review synthesised evidence on the challenges affecting community-based health and disease screening in Africa, examined their implications for programme effectiveness, and identified strategies for strengthening screening and linkage to care.

METHODS

The literature search was conducted in PubMed and Scopus for publications from 2015 to 2025. Search terms included combinations of "community-based screening," "community screening," "health screening," "disease screening," "Africa," and terms relating to barriers, access, uptake, referral, linkage to care, and follow-up. Studies addressing community-based screening of health conditions in African populations were considered for inclusion. Studies conducted outside Africa, those limited exclusively to hospital-based screening, non-English publications, opinion pieces, and reports lacking sufficient methodological detail were excluded. The literature searches yielded 274 relevant articles but 30 articles met the strict inclusion criteria and were synthesized for the narrative review. Titles and abstracts were initially screened, followed by full-text review of potentially relevant publications. Relevant information on study setting, screening context, disease area, implementation barriers, and proposed strategies was extracted and organised thematically. As this was a narrative rather than a systematic review, no formal risk-of-bias assessment or quantitative meta-analysis was undertaken.

RESULTS

Thirty articles were included in the narrative synthesis. Table 1 summarises selected representative studies that informed the review. The selected evidence represented multiple African settings, including Nigeria, Ghana, Kenya, Uganda, Ethiopia, Malawi, Zambia, South Africa, and Madagascar. The literature covered communicable diseases, non-communicable diseases, and cancer screening, with recurrent themes relating to screening uptake, geographical access, sociocultural barriers, workforce constraints, referral, and retention in care. It highlights that while community-led, active case-finding strategies improve early detection, their success remains heavily hindered by systemic bottlenecks, geographic isolation, operational barriers for health volunteers, and deep socio-cultural beliefs. The reviewed evidence suggests that community-based screening can extend screening services to underserved populations and facilitate earlier case detection in selected settings. However, these potential benefits are frequently constrained by limited awareness, resource limitations, sociocultural barriers, weak referral systems, and loss to follow-up. These insights provide a foundation for examining the different types of screening approaches and their relative strengths in addressing these challenges.

Table 2 and figure 1 highlighted how community-based screening expands healthcare reach using local volunteers and integrated health education outside traditional clinics. However, unlike facility-based screening—which benefits from immediate clinical follow-up and existing infrastructure—community

Table 1: Table summarises selected studies that informed the narrative synthesis.

Title	First Author (et al.)	Year	Country/ Continent	Thematic Area	Notes
Communicable and non-communicable diseases: connections, synergies and benefits of integrating care	Harries AD	2015	Multi-country (Africa focus)	Integration of screening	Highlights synergy of NCD and communicable disease screening
Integrating cervical cancer screening into safer conception services	Davies NECG	2019	South Africa	Cervical cancer screening	Pilot study in primary care clinic
Community-based active-case finding for tuberculosis	MacPherson P	2024	Zambia/Malawi	TB screening	Active case finding in communities
Novel approaches to screening for noncommunicable diseases: lessons from Neno	Kachimanga C	2017	Malawi	NCD screening	Innovative community strategies
Assessment of barriers to NCD screening by community health volunteers	Mugambi K	2024	Kenya	NCD screening barriers	Role of CHVs in screening challenges
Barriers to uptake of cervical cancer screening among women in Nigeria	Mafiana JJ	2022	Nigeria	Cervical cancer screening	Systematic review of barriers
Socio-cultural beliefs influencing breast cancer diagnosis and treatment	Afaya A	2024	Ghana	Breast cancer screening context	Cultural perceptions affecting screening uptake
Barriers and facilitators of retention in care after cervical cancer screening	Owokuhaisa J	2024	Uganda	Cervical cancer screening	Patient and provider perspectives
Clients' satisfaction with cervical cancer screening services	Hailu AM	2024	Ethiopia	Cervical cancer screening	Mixed-methods study on satisfaction
Barriers and recommendations for cervical cancer screening program	Olubodun T	2022	Nigeria	Cervical cancer screening	Qualitative study in low-resource setting
Geographic barriers to care at community healthcare level	Evans MV	2022	Madagascar	Access barriers	Geographic challenges to screening

initiatives face higher mobilization costs, require portable equipment, and struggle with weak referral systems for patient follow-up care.

Figure 2 outlines the trade-offs between screening approaches. Community-based screening expands population reach through local volunteers and education, but faces high logistical costs and weak referral pathways. Conversely, facility-based screening leverages existing infrastructure for immediate follow-up care, but primarily reaches individuals already utilizing healthcare services.

A. Types of screening programs

Managing these diseases has been a huge burden for low and middle-income countries (LMICs), and the most effective way to reduce this burden is by screening the population and prompt medical intervention.[6,8] This can be achieved through efficient screening strategies, which come in various forms.

One approach is health facility-based screening, which, although expensive to establish, can be seamlessly integrated into existing healthcare systems.[9] Examples of health facility-based screenings include point-of-care testing or opportunistic screening[10], where rapid tests are used to detect diseases like HIV at the point of care, such as in emergency departments or antenatal clinics, or conducting tests like pap smears and blood pressure checks during family planning clinic visits.[9-11.]

Screening can also be community-based, which may be more practical and feasible. This approach makes screenings more available and accessible through mobile units and partnerships within the community.[12] Targeted screening focuses on specific high-risk groups,

such as migrants or individuals with risky behaviors, like TB screening for smokers or HIV testing for commercial sex workers.[11]

Another approach is integrated screening, in which multiple disease tests, such as HIV, hepatitis, and TB, are performed during a single visit to a health facility or participation in community screening program. This method improves efficiency, access, and resource utilization by combining screenings for various diseases within a single program, often focusing on infectious diseases.[13]

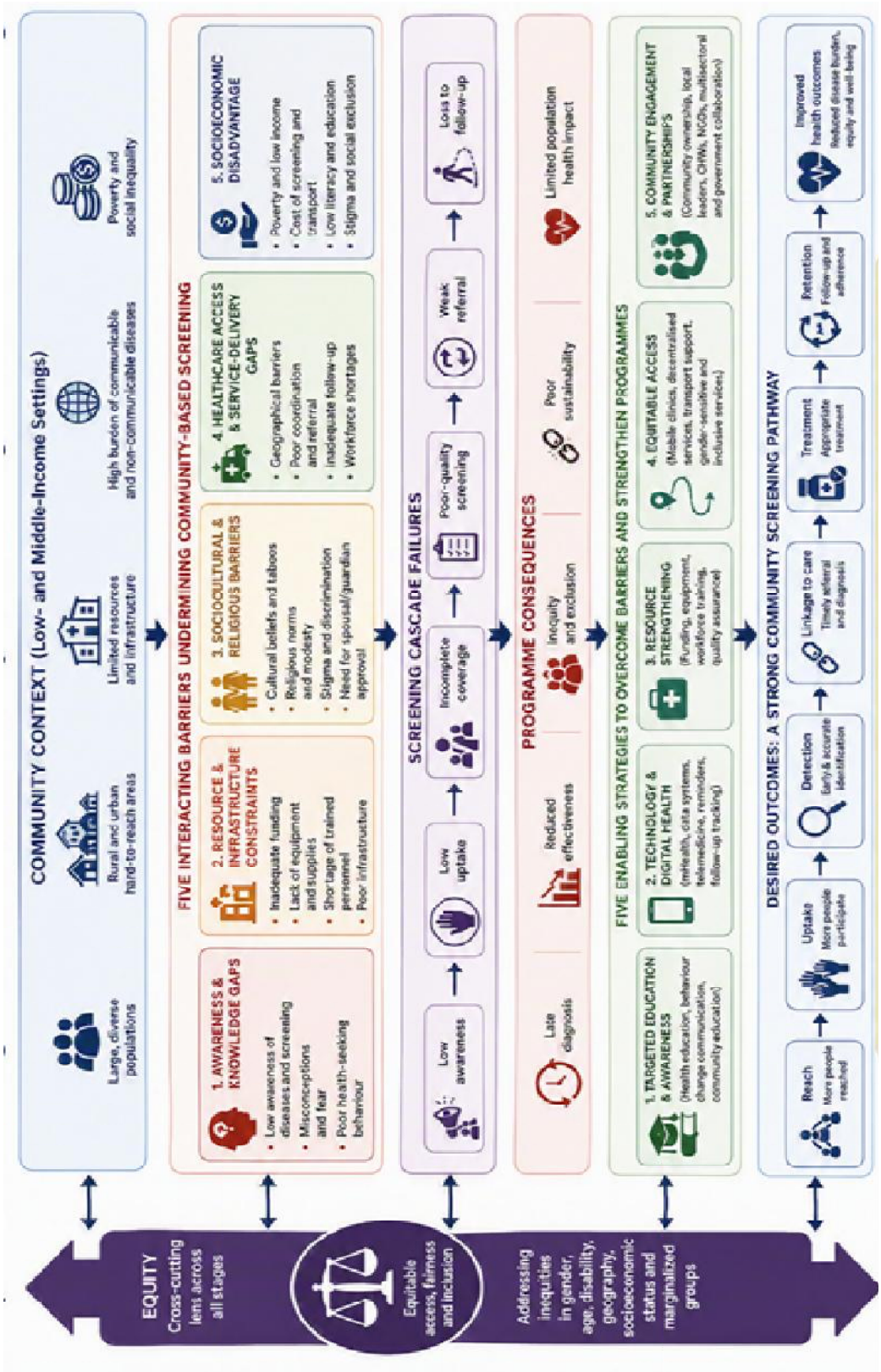

Figure 1: An integrated conceptual framework linking barriers, screening-cascade failures, implementation strategies, and outcomes of community-based screening in African settings.

Table 2: Comparative characteristics of community-based and health facility-based screening models [19-21]

S/N	Characteristics	Community-Based Screening	Health Facility-Based Screening
1.	**Setting**	Takes place outside traditional healthcare facilities, such as in homes, community centers, or outreach events.	Takes place within hospitals, clinics, or other healthcare facilities.
2.	**Reach**	Designed to reach a wider population, including those who may not regularly access healthcare facilities.	Primarily targets individuals who already utilize healthcare facilities.
3.	**Personnel**	Often utilizes community health workers (CHWs) or village health teams (VHTs) for screening and referral.	Typically involves trained healthcare professionals, such as doctors, nurses, or technicians.
4.	**Examples of screening programs**	• **Hypertension screening by Village Head Teams (VHTs):** Village health teams can be trained to measure blood pressure and identify individuals at risk for hypertension. • **Cervical cancer screening in community health centers:** Community health centers can offer Pap tests should be visual inspection with acetic acid (VIA) and other screening tests for cervical cancer. And breast self-examination (BSE). • **Diabetes screening in community pharmacies:** Pharmacists can provide simple blood glucose tests and other screening services for diabetes.	• **Mammography for breast cancer screening:** Breast cancer screening tests are typically performed in specialized clinics or hospitals. • **Colorectal cancer screening with colonoscopies:** Colonoscopies are performed in hospitals or specialized clinics to screen for colorectal cancer. • **Routine newborn screenings:** Newborns are screened for certain conditions in hospitals or clinics.
5.	**Cost and Resource Implications**	• Community-based screening can be costly and resource-intensive due to the need for mobile teams, portable equipment, and mass organization.	• Health facility-based screening is usually more cost-effective for the healthcare system because infrastructure and staff are already in place, but it may lead to higher long-term costs due to missed early detections.
6.	**Health Education and Community Engagement**	• Community-based initiatives often integrate health education with screening, raising awareness and promoting preventive practices. It strengthens community engagement and trust, especially when local leaders or volunteers are involved.	• Facility-based screening may have fewer opportunities for widespread health education since interactions are typically individual and clinical.
7.	**Follow-up and Continuity of Care**	• After community screening, ensuring linkage to care for individuals who test positive can be difficult because follow-up relies on the individual's initiative or weak referral systems	• In facility-based screening, follow-up is usually easier and more immediate since the patient is already within the healthcare system.

(Suthar et al., 2013; Scott et al., 2018; Visser et al., 2013).

Screenings can also be categorised as voluntary or mandatory, each carrying ethical considerations. Voluntary screenings, like HIV testing and counseling, respect individual autonomy and encourage people to seek healthcare without coercion. In contrast, mandatory screenings may be used in specific situations, such as testing infants for genetic disorders like phenylketonuria (PKU) where it is prevalent, screening blood donors for hepatitis, syphilis and retroviral infections before donation.[14,15] Mandatory screenings can help identify conditions early. However, they must be implemented with caution to ensure they do not discourage individuals from accessing healthcare or undermine public health efforts.

B. Community-based screening programs in Nigeria

Numerous community health screening programs have been launched in Nigeria to reach individuals with limited access to conventional healthcare services. Community-based screening aims to detect disorders or risk factors in seemingly healthy individuals.[16,17] Examples of community-based screening programs for NCDs in Nigeria include house-to-house screenings

for cardiovascular diseases, such as high blood pressure, high cholesterol, and other risk factors. Other NCD screenings include blood glucose tests for diabetes, cancer screenings like mammograms and pap smears for breast and cervical cancer respectively etc.[16,17]

For communicable diseases (CDs), community screening programs focus on identifying infections early, often in asymptomatic individuals, to ensure timely treatment and prevent further transmission.[18] Examples include HIV screening, which is essential for early diagnosis and access to antiretroviral therapy, and Hepatitis B and C screenings, which help identify individuals at risk and connect them to care. Hepatitis screening also aids in identifying chronic infections and preventing complications.[18] Other key screenings include TB testing for latent TB infections, which can prevent progression to active TB disease, and universal screening for sexually transmitted infections (STIs). Community-based Screening programs may also address other infectious diseases, such as gonorrhea, chlamydia, and local viral infections, depending on the regional context.

Community-based screening is often proactive, health workers go into communities to actively find cases even among people without symptoms while Health facility-based screening is typically reactive, waiting for patients to present themselves with symptoms before testing.[12]

The benefits of community-based screening include screening a larger population, early diagnosis of diseases, prevention of disease transmission or infection, prevention of disease progression to active cases, ensuring access to treatment, reducing healthcare costs, and decreasing morbidity and mortality.[12,16]

C. Challenges of community screening of diseases

The community screening programs have proven effective in the early and timely diagnosis of certain diseases that could have led to severe complications if undetected. However, reviews of past community screening initiatives have highlighted several challenges. These include high implementation costs, challenges in maintaining patient follow-up as stated in Table 2 (which summarised peculiarities of community-based screening over health facility-based screening), sociocultural and religious barriers, security challenges in conflict-prone regions, shortage of healthcare personnel, and socioeconomic factors.[22,23] Some of these challenges can be addressed and require the commitment of key stakeholders to ensure the successful execution of screening programs. These challenges can be categorised into five key areas, which are discussed below.

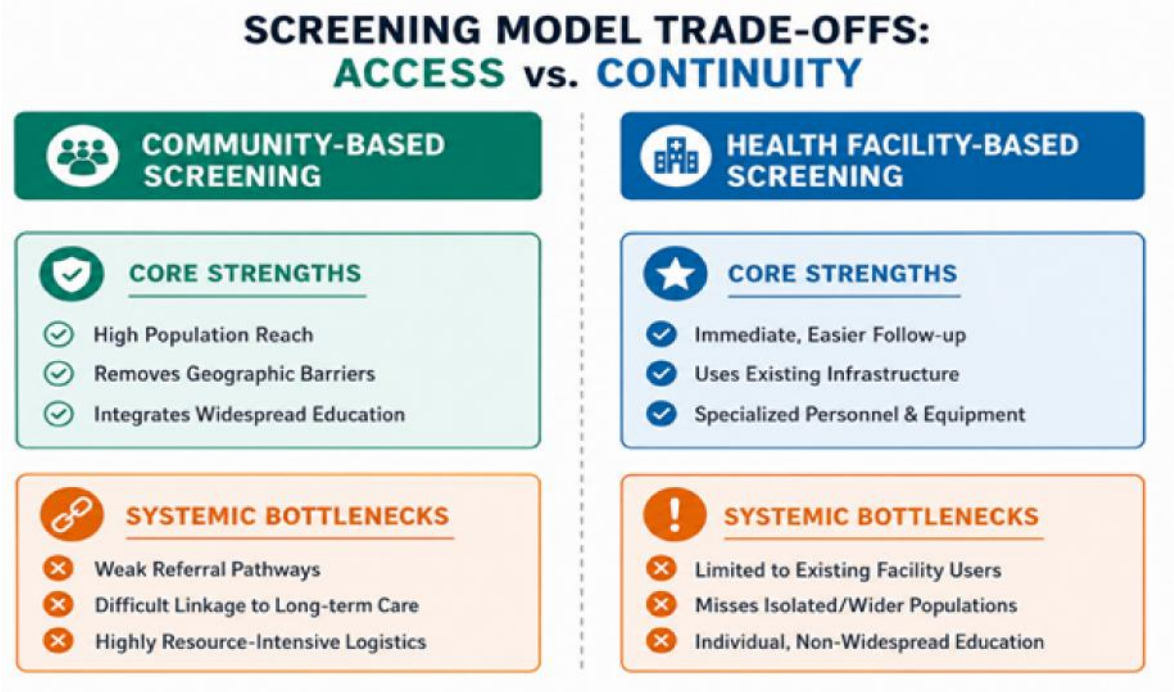

Figure 2: Comparative analysis of community-based versus health facility-based screening models: balancing access and care continuity

i. Awareness and knowledge gaps

Many individuals are unaware of the early symptoms of diseases and the importance of screening, leading to low participation in screening programs.[22-24] Since some diseases are asymptomatic in their early stages, it

is essential to encourage good healthcare-seeking behavior among the population, regardless of perceived risk. Community health workers play a critical role in addressing these gaps by providing culturally appropriate health education, correcting misconceptions about screening, alleviating fears related to test results, and actively mobilizing community members to participate in community-based screening programs.[23,25]

ii. Limited resources and infrastructure

Financial constraints, which resulted in non-appropriation of funds to screening programs, non-availability of appropriate equipment, and trained personnel, are a major hurdle.[24,26] While the government is responsible for ensuring that all diseases affecting citizens are well managed, scarce resources will only allow it to prioritize the screening of diseases of public health importance. In addition, poor infrastructure is a major barrier to community screening program.[27] Likewise, lack of essential supplies and consumables for screening tests, such as pap smears or other diagnostic tools, could be a significant problem in rural areas.[24,27]

iii. Sociocultural and religious barriers

Cultural beliefs and religious practices related to modesty can deter individuals from participating in certain screening procedures.[24,25] For instance, screenings such as pap smears for cervical cancer or mammograms for breast cancer require women exposing parts of their bodies, which may conflict with certain cultural or religious norms. These beliefs can prevent individuals from seeking screenings and evaluation, even when symptoms are apparent.[25] Additionally, some individuals may prefer female healthcare providers for specific procedures, which can limit uptake of screening services. In some communities, women require spousal approval before seeking medical care, which can delay or prevent participation in screening programs.[28] Cultural taboos surrounding the use and disposal of body products such as feces and urine also pose significant barriers to screenings that depend on these samples, reducing acceptance and uptake.

iv. Healthcare access and service delivery issues

Many people, especially in rural areas, face geographical barriers to accessing community healthcare facilities offering screening services.[29] Lack of coordination between healthcare providers can lead to missed screening opportunities. Even when screening is done, inadequate follow-up care may result in poor outcomes. Some patients may not adhere to referrals or follow-up appointments.[26,30] A shortage of trained healthcare personnel, especially in rural areas, hinders screening efforts despite available resources and equipment. For example, cervical cancer screening with pap smears is hindered by a lack of pathologists to interpret results, leading to increased waiting times and discouraging participation.[26]

v. Socioeconomic factors

The recent Nigerian economic policies have had significant negative effects on the population, contributing to increased poverty, a trend seen globally.[31] Many citizens' purchasing power and financial capacity have been reduced, and low income can prevent access to screening services, especially when they are not free due to the costs of tests and transportation.[32] Additionally, the literacy level of the population affects how quickly individuals seek available healthcare and screening services. Lower education levels are linked to lower rates of healthcare utilization, including screenings.[33] Moreover, some economically disadvantaged individuals may face discrimination or stigma based on their health status or perceived disease risk, which can deter them from seeking screening.[34]

D. Impacts of the challenges on the community screening programs

The challenges encountered in the implementation of the aforementioned existing screening programs have had various impacts on the effectiveness of the screening programs. Some of the impacts include inability to sustain the programs, limited acceptability among the community, inadequate coverage of the many inaccessible communities, and doubt on the reliability of the results.[20,35] Therefore, providing achievable strategies that can help overcome the challenges and reducing the impacts of these challenges will be beneficial to the populace who are the focus of these community screening programs.

E. Strategies to overcome these challenges

There are practical strategies that have been demonstrated to work in overcoming these challenges, and they are outlined as follows:

i. Targeted health education and awareness

There is a need to raise awareness about screening for these diseases and provide targeted health education to the population.[19,20] A key strategy for enhancing awareness of these health screening programs is to create culturally relevant health education materials and campaigns that address community-specific needs and concerns.[36] For instance, a community-based medical rallies involving free screening program conducted in Ibadan, Nigeria, successfully identified high rates of hypertension, obesity, and elevated blood sugar among participants by bringing preventive health services directly to urban households.[16] This example

demonstrates that community-based approaches, whether through mobile clinics, radio broadcasts, social media, or engagement with local leaders, can effectively overcome barriers to participation.[37] The public should also be educated on the importance of early detection and disease prevention through healthy behaviors and lifestyle choices, drawing lessons from these successful campaigns to ensure sustained impact.

ii. Leveraging on technology

The use of affordable and relevant low-cost technologies for screening programs is essential in the 21st century. Mobile health applications represent a key technology that can support community health screening. Therefore, mobile apps for screening, reminders, and follow-up, especially in areas with limited access to healthcare facilities, are crucial.[28] Additionally, leveraging on modern apps and technology to collect data directly from the field or community, as well as analysing this data to identify health trends, target interventions, and assess program effectiveness, will enhance the efficiency of screening programs. The use of telemedicine and mobile clinics for remote consultations, screening, and follow-up care, particularly in underserved areas, will also be valuable.[38]

iii. Addressing logistical and resource constraints

Screening procedures should be simplified, and waiting times reduced to improve participants' experience and programme efficiency. Healthcare workers and community health workers must receive adequate training to ensure competence in conducting screenings and providing health education. Additionally, training more female healthcare workers can help alleviate workload pressures and address cultural and religious barriers.[39] Engaging policymakers and key health sector stakeholders to increase funding for disease screening and prevention programs will be crucial, especially in low- and middle-income countries like Nigeria.[24,26] Developing a sustainable funding model and partnerships with NGOs and international health organizations will ensure the long-term success of these programs.[40] Regular evaluations of screening program effectiveness, with necessary adjustments, will also help improve outcomes.

iv. Ensuring equitable access and addressing barriers

It is essential to ensure that screening services are accessible to all members of the community, regardless of their location, socioeconomic status, or other barriers. Issues such as transportation, language, and cultural differences that could prevent participation should be addressed.[27,28] Adequate funding, staffing, and equipment are also critical to support screening programs.[26] Many rural communities lack necessary infrastructure, such as proper roads and electricity, which can hinder screening activities.[27] Improving infrastructure, like road access and electricity, will enhance accessibility to these areas and may also encourage greater participation from healthcare workers involved in the screening programs.

v. Community engagement and participation

Strong collaboration among healthcare providers, community organizations, and government agencies is essential to achieve a coordinated and effective approach. Meaningful involvement of local leaders, community health workers, and community members in the design and implementation of screening programs is key.[41]

Strengthening community relationships through transparency and accountability is essential for building trust and promoting participation in screening programmes.[42] Engaging male partners in the planning and decision-making processes may further enhance women's participation. Providing opportunities for residents to take ownership of their health and engage in decision-making will be highly beneficial.[41,43]

DISCUSSION

The review identified a clear trade-off between population access and continuity of care across different screening delivery models. Community-based screening improves population reach by taking services closer to underserved populations, overcoming geographical barriers, facilitating early case detection, and creating opportunities for widespread health education. However, these advantages are frequently undermined by weak referral pathways, inadequate diagnostic capacity, poor linkage to long-term care, shortages of trained personnel and equipment, high logistical costs, and difficulties sustaining follow-up. Conversely, health facility-based screening benefits range from established infrastructure, specialised personnel, diagnostic services to more immediate opportunities for referral and follow-up, but largely reaches individuals who already have contact with the health system and may therefore miss geographically isolated, socioeconomically disadvantaged, or otherwise underserved populations. Across LMIC settings, additional barriers to community screening—including limited awareness, sociocultural and religious concerns, financial constraints, weak infrastructure, insecurity, and shortages of health workers—further disrupt progression from screening to diagnosis and treatment. Overall, the findings suggest that the effectiveness of screening should not be judged solely by the number of individuals reached or screened, but by the ability of the health system to move screen-positive individuals

through diagnostic confirmation, linkage to care, treatment, and sustained follow-up.

These findings are broadly consistent with WHO guidance and evidence from other LMICs, but they also expose an important limitation of many community-based screening initiatives: expanded access does not necessarily translate into improved health outcomes unless screening is embedded within a functional continuum of care. WHO emphasises that screening is a programme rather than an isolated test and cautions that it should be implemented only where adequate resources, quality assurance, confirmatory diagnosis, and effective treatment pathways are available; consequently, high screening coverage without reliable downstream care may generate unmet clinical need, loss to follow-up, unnecessary anxiety, and inefficient use of scarce resources.[44,45] Evidence from LMICs similarly shows that community-based approaches can increase case detection and reach underserved populations, while follow-up visits, counselling, household outreach, and active facilitation of referral can improve treatment initiation and treatment success.[46] At the same time, studies from LMICs settings report barriers similar to those identified in this review.[47,48] The apparent contrast between community- and facility-based screening should therefore not be interpreted as evidence that one model is universally superior; rather, the two approaches address different failures in the screening pathway. Community-based models are particularly effective at overcoming the "access gap," whereas facility-based services are generally better positioned to support the "continuity gap." The implication for LMIC health systems is that the most effective strategy is likely to be an integrated hub-and-spoke model in which community screening is explicitly connected to designated facilities through standardised referral protocols, patient navigation, digital tracking, community health workers, and feedback mechanisms. Such an approach would preserve the reach of community-based screening while reducing the loss to follow-up that can otherwise weaken its population-level impact.

Recommendations

Community-based screening programmes should be designed as components of an integrated screening-to-care pathway rather than as stand-alone outreach activities. Priority should be given to strengthening confirmatory diagnosis, standardised referral pathways, patient navigation, tracking of screen-positive individuals, and linkage to treatment. Where epidemiologically appropriate and operationally feasible, compatible communicable and non-communicable disease screening services may be integrated to improve efficiency. Sustainable financing, trained community health workers, digital follow-up systems, and continuous programme evaluation should support implementation.

Limitations

This narrative review was limited to studies identified by authors and restricted to African countries. As a result, findings may not fully capture challenges or strategies from other LMIC regions such as Asia or Latin America. Additionally, the reliance on published literature may have excluded valuable insights from unpublished community health initiatives or grey literature. Because the review relied on narrative analysis rather than quantitative methods, the findings may not be easily generalised across all LMIC. Finally, as a narrative review, the study did not undertake formal risk-of-bias or methodological quality appraisal, and the selection and interpretation of evidence may therefore be subject to reviewer selection bias.

CONCLUSION

Community-based screening is an important strategy for extending preventive and early-detection services to underserved populations in Africa. However, its population health impact is constrained by limited awareness, resource and infrastructure gaps, sociocultural barriers, inequitable access, weak referral systems, and loss to follow-up. Screening programmes should therefore be designed as integrated screening-to-care pathways that connect population reach and early detection with diagnostic confirmation, timely referral, treatment, and sustained follow-up. Targeted health education, appropriate digital technologies, community engagement, trained health workers, sustainable financing, and strong policy commitment are essential to improving programme effectiveness, equity, and long-term sustainability.

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