Access to and Quality of Primary Healthcare: a Multi-Country Qualitative Case Study in West and East Africa

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Abstract

Background: Universal health coverage is one of the Sustainable Development Goal targets known to improve population health and reduce financial burden. There is little qualitative data on access to and quality of primary healthcare in West and East Africa. We elicited in-depth viewpoints of healthcare users and providers, and other stakeholders regarding access to and quality of healthcare.

Methods: A qualitative case study was conducted in four communities in Nigeria, and one community each in Kenya, Uganda and Tanzania in 2018. Purposive sampling was used to recruit 155 participants for 24 focus group discussions, 24 in-depth interviews, and 12 key informant interviews. The conceptual framework in this study combined elements of the Health Belief Model, Health Care Utilisation Model, four ‘As’ of access to care, and pathway model to better understand health-seeking behaviours of the study participants. The data were analysed with MAXQDA 2018 qualitative software to identify three themes identified a priori and one emerging theme.

Results: Access to primary healthcare in the seven communities was limited. Quality of care was perceived to be unacceptable in public facilities whereas cost of care was unaffordable in private facilities. Patients and health providers and stakeholders highlighted shortage of equipment, frequent drug stock-outs and long waiting times as major issues, but had varying opinions on satisfaction with care. Use of herbal medicines and other traditional treatments delayed or deterred seeking modern healthcare in Nigerian sites.

Conclusions: There was a substantial gap in primary healthcare coverage and quality in the selected communities in rural and urban East and West Africa. Alternative models of healthcare delivery should be used to fill this gap and facilitate achieving universal health coverage.

Background

The year 2008 marked both the 60th birthday of the World Health Organization (WHO) and the 30th anniversary of the Declaration of Alma-Ata on Primary Health Care (PHC). In the same year, WHO reported that people were healthier and lived longer than in 1978 when the Alma Ata Declaration was signed; hence, affirming the progress made toward achieving “health for all”. Some countries, especially those that make up today’s middle-income countries, made great improvements and were on track to achieve the targets in the health-related Millennium Development Goals. For example, in Chile, Malaysia, Portugal and Thailand, mortality rates were less than one-fifth of what they were in 1978.

However, this progress was uneven and characterised by marked variations between countries. For example, 20 of the 25 countries where under-five mortality was two-thirds or more of the 1978 levels were in sub-Saharan Africa (SSA). These high levels of mortality were associated with poor access to healthcare. Nearly a decade after the WHO proposed PHC reform to refocus health systems toward health for all, specifically universal coverage reform to improve health equity, at least one-half of the world’s
population still lacked access to essential health services in 2017.  
A recent multi-country study in SSA corroborates the severely limited access to primary healthcare. 
Furthermore, poor-quality healthcare is associated with excessive mortality. Of the 8.6 million excess deaths that were amenable to healthcare in 2016 globally, 5.0 million is attributable to poor-quality healthcare.

There is a renewed effort to address health inequity through Universal Health Coverage (UHC) which would result in all people accessing quality essential health services without exposure to financial hardship. The WHO and World Bank have acknowledged, within the context of the Sustainable Development Goals (SDGs), UHC as a means to improve population health and reduce the financial burden of healthcare in Low- and Middle-Income Countries (LMICs). Of the 17 SDGs adopted by the United Nations General Assembly in September 2015, SDG 3 focuses on ensuring healthy lives and promoting well-being for all at all ages. Target 3.8 of SDG 3 – achieving UHC, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all – is the key to attaining SDG 3 as well as the health-related targets of other SDGs.

However, there is paucity of information on access to and quality of primary healthcare from local studies in LMICs, especially in low-income countries of East and West Africa. We, therefore, conducted a multi-site study to provide in-depth viewpoints of healthcare users and providers, and other stakeholders regarding access to and quality of healthcare in four communities in Nigeria, West Africa and one community each in three East African countries - Kenya, Uganda and Tanzania.

Methods

Study settings

This was a community-based study conducted in four Nigerian communities (Okpok Ikpa, Ikire, Ogane-Uge and Olorunda Abaa); and one community each in Kenya (Viwandani, Nairobi), Uganda (Soroti) and Tanzania (Ukonga, Dar es Salaam). The communities were chosen based on existing collaborations with investigators in each site (Additional file 1).

Study design and population

This research was a qualitative case study of access to and quality of primary healthcare in healthcare facilities and other health-related institutions in communities across the four African countries. The study population consisted of community members (youth, men and women); healthcare users and providers; health service managers and community health volunteers; members of landlord associations; community-based organisations; and traditional and religious leaders.

Inclusion and exclusion criteria for research participants
Inclusion criteria were adults 18 years and above and community members residing in the communities for one or more years. Individuals judged to not have autonomy of decision making were excluded.

**Conceptual framework**

A conceptual framework (Figure 1) was developed to facilitate the exploration and interpretation of health-seeking behaviour. As was used elsewhere, this conceptual framework combined the elements of the Health Belief (HB) Model, Health Care Utilisation (HCU) Model, the four ‘As’ of access to care (Availability, Accessibility, Affordability, and Acceptability), and the pathway model to better understand health-seeking behaviours of participants from diverse cultures, ethnicities and religious backgrounds across the four countries.

The purpose of the HCU Model is to identify conditions that either facilitate or impede healthcare utilisation. According to the HCU Model, response to ill-health depends on predisposing factors (existing culture and health beliefs), enabling factors (e.g. health insurance) and need factors such as perceived and evaluated need for medical care. Concerning the fours ‘As’ of access, people take action to address their ill-health if health services are available, accessible, affordable and acceptable. The HB Model indicates that treatment options depend on perceptions of susceptibility to and severity of illness, perceived benefit of and barriers to care, cues to action (promoting awareness), and self-efficacy (providing guidance). The double-headed dotted arrows indicate the pattern in which participants switched from one treatment option to another depending on their satisfaction with or response to treatment received.

**Data collection**

The qualitative study involved 24 focus group discussions (FGDs, n=155), 24 in-depth interviews (IDIs) and 12 key informant interviews (KII) whose participants were selected using purposive sampling methods (Additional file 2). Participants were interviewed in the local language (Efik, Yoruba, Igala and Swahili) in a private location within their communities. The FGDs lasted 60-90 minutes and were held for 6-11 participants of similar age range. The IDIs and KIIs lasted about 30 minutes.

**Quality assurance**

The qualitative fieldworkers with 5-10 years field experience received training for 2-3 days. Community mobilisers guided the fieldworkers in a few study sites. One field worker audiotaped and moderated the discussions while another took notes and documented non-verbal cues. Interview guides were translated into local languages. Audio recordings were translated and transcribed into English. The site lead researchers listened to the audio recordings to identify errors and discrepancies.

**Data analysis**

We conducted a thematic analysis of transcribed FGDs and interviews using the MAXQDA 2018. A combination of deductive and inductive analytical approaches was used. Deductive analysis was based
on three themes identified a-priori: access to healthcare, quality of healthcare and health-seeking behaviour. An emerging theme, quackery by patent medicine vendors (PMVs - drug vendors who provide the first and the main point of care in communities), that was not identified a-priori was analysed inductively.

The corresponding author, SA, coded the data which were verified by the co-authors through the reading and re-reading of the quotes. A code book was developed based on recurring pre-identified themes and emerging theme. Reliability of the coded data was verified through discussions of inconsistent codes among co-authors until agreement was reached.

**Results**

Verbatim quotes were used to illustrate participants’ perspectives of access to and quality of primary healthcare. The main findings showed limited access to healthcare and unacceptable healthcare quality. Having health insurance was an enabling factor in utilising healthcare in East Africa while use of herbal medicines and other traditional medicine practices delayed or deterred seeking modern healthcare. Patients, care health providers and other stakeholders mentioned insufficient equipment, frequent drug stock-outs and long waiting times as major quality issues, but differed in their opinions on general satisfaction with quality of care, with healthcare provides sometimes reporting high quality of services in the same centres where patients reported low quality.

1. Access to primary healthcare

A. Facilitators

**Free health services**

Provision of free health services by some public facilities was perceived to facilitate access to primary healthcare by providing free drugs and tests, but this was often associated with long waiting time. On the other hand, private facilities were thought to be unaffordable to many users, even though waiting time was shorter.

*What I like most about the government hospital is the fact that you don’t pay. If you are lucky and you find when drugs are available, you will get drugs. And even testing will be done for free, and drugs you get for free and even if its HIV they test you for free,* (IDI with an elderly man, Uganda).

**Health insurance**

A participant whose opinion reflected most other participants’ perception was that having a health insurance was a facilitator of access to primary healthcare irrespective of the cost of treatment.

*It (referring to a type of health insurance scheme) caters for all health services regardless of the illness. It doesn’t categorize if its amputation, laboratory services* (FGD, Respondent 1, a young man, Kenya)
However, some participants had varying opinions regarding inability to access certain services which necessitated out-of-pocket expenditures in certain health facilities that did not accept health insurance cards from some insurance providers.

*X health insurance scheme helps very little because they have to pay for some services in cash, sometimes people have to dig into their pockets. It doesn’t cover everything because there are some drugs you’ll be told to buy* (KII with a Religious Leader, Kenya).

*Again the cards that ought to be used (participant mentions names of some insurance providers) are supposed to be accepted and used for outpatient services. They are not used for accessing services* (KII with a Community-based Organisation Leader, Kenya).

*I went to the X dispensary with my insurance card, I was rejected (everyone laughs)* (FGD with women, Tanzania).

**B. Barriers**

Participants mentioned inability to afford high costs, distance to health facilities, unavailability of or shortage of health personnel, limited operating hours of healthcare facilities, and patronage of PMVs.

**Out-of-pocket payments and inability to afford high costs of care**

Some participants reported having challenges in accessing health services due to exorbitant fee-for-service charged in private facilities.

*The last time I went to X health facility, something entered my ear. ..They gave me a letter and sent me to another health facility, but I didn’t have money. So I tore the letter and stayed with that thing inside my ear.* (FGD, Respondent 3, a young woman, Kenya).

*You also pay for investigations. Nothing is for free. You have to pay for everything. For us who are poor, we face a lot of challenges getting medical services* (FGD with women, Tanzania).

*When I asked them to attend to me first since I was bleeding they asked me for money which I didn’t have then. ...I was forced to deposit my phone after which they attended to me. So I had to go sort the finances out and come later to collect it.* (FGD, Respondent 2, a young man, Kenya).

**Distance to health facilities**

Far distance to healthcare facilities posed a challenge. The cost of seeking healthcare is further increased by transportation costs.

*Most people trek. Like those without a car or a motorcycle, once you are sick and you stand by the road and there is no bike to take you there (referring to the health facility), you have to walk there. Like where I*
live, I trek o! (o is an exclamation in Nigeria used to emphasis or buttress an argument). It takes me like one hour twenty something minutes. (FGD, Respondent 1, a middle-aged woman, Okpok Ikpa, Nigeria).

**Unavailability of health personnel**

Participants commonly reported unavailability of doctors and nurses.

You know at times the doctors, the nurses have their other private clinics so they leave the other side of the government and go to the other side of the private. So when you go there, you may not get them easily. (IDI with a young man, Uganda).

They don't even have the capacity to handle malaria. They only have a Community Health Officer, there is no competent nurse there (FGD, a young man, Olorunda, Nigeria).

I went the first time I didn't get the doctor, the second time I didn’t get the doctor until the third time is when I received the services (FGD, Respondent 4, a young woman, Kenya).

**Healthcare facility days and hours**

Most discussants reported public facilities did not operate for 24 hours in a day and during weekends, unlike private facilities.

Many times I’ve wanted to go to voluntary counselling and testing but my husband is at work…if you go to facility A, you find that the hospital is closed over the weekend and that is when my husband has time, on Saturday afternoon. So it’s a real problem (FGD, Respondent 3, a young woman, Kenya).

For example in Facility B, if opening time is 9:00am, if you go there at 12:00 pm they will not serve you because the time is gone. (FGD, Respondent 7, a middle-aged woman, Kenya).

**2. Quality of primary healthcare**

**General (dis)satisfaction with quality of care**

There was a variety of responses regarding quality of care with some participants reporting satisfaction while others reported dissatisfaction with the quality of care.

We are not condemning the health facility (referring to a specific health facility). I remember a team of white people came here and I was operated upon. I enjoyed it very well (FGD, Respondent 6, a middle-aged man, Okpok Ikpa, Nigeria).

I think the quality is good (referring to a private facility), I can give them good (IDI with an elderly man, Uganda).

You can meet a doctor or nurse so he will not listen to you (referring to a public facility). While you are still explaining how you feel, but even before you finish, they write you prescription to get medicine (mmh).
Now you keep asking yourself what is this medicine for (FGD with women, Tanzania).

**Health personnel factors**

Retaining qualified health personnel in public facilities was reported to be challenging due to low payments. In addition, health personnel working in public facilities were said to be sometimes unprofessional toward their clients. On the other hand, patients reported that health personnel in private facilities were unqualified and lacked training.

We try as much as possible to employ qualified medical personnel ... for high standards in the provision of services. ... For remuneration, we don't pay them what they expect to be paid so sometimes we lose staff. So staff turnover is higher than what we desire (KII with a Health Service Manager in a private health facility, Kenya).

Even those ones (referring to private facilities) don't have qualified staff. They are not trained. Some people who have worked in pharmaceutical shops are just recruited and they just dress them up to attend to people. (FGD, a man, Olorunda, Nigeria).

But again government employees don't treat people well, you can ask them a good question and they answer you with attitude so if you have money you better go to private hospitals or to chemist (FGD, Respondent 1, a young woman, Kenya).

Hmmm at times nurses tend to be rude (IDI with a young woman, Uganda).

**Waiting time**

Respondents reported that waiting time was longer in public facilities due to late arrival of doctors. Long queues in these facilities were said to be the reason why people visited the PMVs.

... You don't take time (referring to a private facility), not like the main hospital (referring to a public facility) where you go in the morning, then take almost the whole day when you are fully attended to because of the population (IDI with an elderly man, Uganda).

If you go to the General Hospital, just have it at the back of your mind that it is when God releases you that you will leave the place. By now people will already be many there and the doctor will not come until 11.00 am because government work is not work that you will be sweating over (FGD, an elderly woman, Ikire, Nigeria).

So it forces you to go to the chemist no matter the cost since in the public facility there is a long queue (FGD, a young man, Kenya).

**Drug stock-outs**
Some participants reported that healthcare was free in public facilities, but drugs were frequently out-of-stock forcing patients to go to PMVs.

*Even after the doctor sees the person, he just hands him a prescription to buy his drugs outside the hospital and as such people buy the quantity they can afford not the complete dose (FGD, a young man, Ikire, Nigeria).*

*The city council has indicated that the health services are free and when you seek help they prescribe drugs but upon going to retrieve them you are told they have none (FGD, Respondent 6, a middle-aged man, Kenya).*

**Interrupted power supply**

Erratic electricity supply was reported by several participants in Nigeria.

*It is very difficult to get medical tests done in this community, even at the public hospital. I have to buy three litres of fuel (referring to the purchase of petrol to power the hospital-owned electric generator which is the responsibility of the hospital) each time I want to have a blood test done as ordered by the doctor. I have done this six times over the last two months (FGD, an elderly man, Ikire, Nigeria).*

**Lack of equipment**

The lack of equipment to conduct basic tests was reported to negatively impact the quality of service delivery.

*Again service delivery is a challenge since they (referring to public facility) lack equipment to carry out tests (FGD, Participant 5, a young man, Kenya).*

3. Health-seeking behaviour

Most participants reported that their first choice for treating a minor illness was to treat themselves at home with medicines previously bought from PMVs and/or local herbs, often administered through enema. This was widely reported in Nigeria where there is a traditional belief that this purges the body of impurities. The next line of action was to visit a PMV and only if that was not possible or effective would patients go to a health facility.

**Self-medication at home**

Self-medication with herbs and drugs bought from chemists was reported to be a common practice to treat illness at home.

*I pump o (referring to self-administration of herbs through the anus using a pump-like device) because in this our community, we believe in tradition. Once you are sick, the first thing that you would do is to wash*
your system out before treating. ... we have leaves, herbs that can help us in this community to wash our system (FGD, a middle-aged woman, Okpok Ikpa, Nigeria).

Sometimes I use Aloe Vera when I feel malaria (mmh) I can only laugh well and drink, we also use it well and feel better (FGD with men, Tanzania).

**From home to patent medicine vendors (PMVs, also referred to as chemists)**

Some participants reported visiting PMVs when there was no relief from herbs and drugs used for self-medication at home.

> You have to take enema to wash out all the dirt from the stomach from what you ate. This will give you some relief but if it doesn't, you have to go to the chemist to get some drugs (FGD, an elderly man, Okpok Ikpa, Nigeria).

**From patent medicine vendors (chemists) to health facilities**

Health facilities were visited when drugs bought from PMVs did not relieve symptoms or when an illness was exacerbated.

> From the chemist if that disease does not subside, we can now find way to go to the health centre (FGD, a middle-aged man, Okpok Ikpa, Nigeria)

> The convenient way is getting medication from the chemist and if the conditions persist we seek help from the hospitals (FGD, a young man, Kenya).

**From health facilities back to patent medicine vendors or traditional healers**

After undergoing a consultation with health personnel, some participants bought medications prescribed by doctors from PMVs due to frequent drug stock-outs in health facilities. There were instances participants were referred back home to take herbs.

> ... The doctor in the health facility instructed me to buy the drugs from the facility’s pharmacy. But when I went there it was unavailable, so I went and bought the drugs from a chemist (FGD, a middle-aged woman, Okpok Ikpa, Nigeria).

> Some people are referred back to their homes to use native treatment (FGD, a young man, Ikire, Nigeria).

**Religion and traditional medicine**

A few participants reported seeking care from an outreach programme conducted by a church in which people were tested and given medications. It was common practice in a few sites for patients to consult their pastors for prayers and receive supernatural healing, pregnant women to seek help from churches where herbs and prayers were prescribed and traditional birth attendants (TBA) to prescribe a
combination of traditional medicine and prayers to pregnant women for a safe delivery. The TBAs and spiritual homes sometimes referred cases to the health facilities.

There are times churches will come with loudspeakers and invite people to come, they will give them drugs and test them for like three days and go back again (FGD with men, Olorunda, Nigeria).

....when I visit them (sick persons), they say they were prayed for by their pastor so they are well. The challenge is that you cannot force them to go to hospital (KII with a village leader, Kenya).

Pregnant women go there (referring to the church). When you go there, the pastor’s wife will attend to you and give you enema so the baby warms up in your belly. If you need drugs, she advises you on what to take. If it is a good pastor’s wife, she will tell you to go to the hospital (FGD, a middle-aged woman, Okpok Ikpa, Nigeria)

There are some people who go to church to give birth but are unable to and they refer them to me. As a Traditional Birth Attendant (TBA), you have to be god-fearing. Whatever is expected of you to help, you have to until she delivers. They live with me in my house. I take them through fasting and prayers until they give birth. I refer difficult cases to the hospital and also refer them for immunization (FGD, a middle-aged TBA, Okpok Ikpa, Nigeria).

Emerging theme

Patronage of PMVs

PMVs were perceived to be affordable and accessible than health facility-based services. In addition, they (PMVs) were flexible with payments of fee-for-service in instalments, regularly had medications in stock and their clients did not have to wait in long queues to be attended.

What is the point of going to the hospital when you would be given a prescription to take to the chemist? It is cost effective to take the little money you have to the chemist first of all and buy your drugs (FGD with young men, Ikire, Nigeria

Another thing I’d like to add that really impressed me about the chemist man (PMV) is that I didn’t have enough money to purchase the drugs, so he asked me to go and bring the money to him later. I was satisfied with his service (FGD, Respondent 4, a middle-aged man, Okpok Ikpa, Nigeria).

They (doctor) may give you prescriptions and you buy there (hospital) but they may be selling them (medications) for a higher price than a chemist (IDI with a young woman, Kenya).

I go to the chemist to mix drugs for me since the chemist is close to me. They attend to me quickly and give my drugs according to my complaints (FGD, Respondent 3, a young woman, Okpok Ikpa, Nigeria).

Quackery by Patent Medicine Vendors (Chemists)
Some PMVs, sometimes referred to as *Kosongbo* in Nigeria, which means “run into the bush when you see law enforcement agents” in Yoruba”, reportedly misdiagnosed their clients and prescribed medications to treat conditions that the medications were not indicated for. A few PMVs were also reported to profiteer from the sale of substandard or expired medicines.

*I had palpitations and asked a Kosongbo to treat me, he gave me moduretic (an antihypertensive medication) which he said I should take twice daily, I almost lost my life in the process and was rushed to the hospital for treatment* (FGD, a young woman, Ikire, Nigeria).

*Again let me also point on the community chemists. Most of the community members are not aware that these are business people who will mostly diagnose one with typhoid. If your situation is complicated you are diagnosed with typhoid. I recall a case where a son went to a local chemist and was diagnosed with typhoid and was given up to seven jabs (referring to injections). Eventually we went to a public hospital with the situation not improving and was eventually diagnosed with Tuberculosis.* (FGD, a young man, Kenya).

*If it is a bad chemist you patronize, he could sell expired drugs to you which won’t work. You’d then start moving from pillar to post (which means to seek help from one place to another)* (FGD, a middle-aged man, Okpok Ikpa, Nigeria).

**Discussion**

Access to primary healthcare was limited and where available, its quality was perceived to be unacceptable in public facilities and costs of care in private facilities was unaffordable. Use of health insurance was considered to be an enabling factor in utilising healthcare in East Africa while use of herbal and traditional medicine was associated with delayed use of modern healthcare in Nigeria.

A multi-country study in East and West Africa reported health service utilisation factors such as out-of-pocket expenditures; inability to pay premiums; high costs of care, especially in private facilities; physical distance from healthcare facilities; staff shortage and lack of confidence in health insurance schemes were barriers to accessing healthcare. ³ In addition to these, our participants also identified unprofessional behaviour of doctors and nurses; unavailability of doctors leading to long waiting time; drug stock-outs; lack of medical equipment and interrupted electricity supply, especially in Nigeria, as other major barriers and quality issues. Many of these factors have previously been reported in South Africa. ¹⁰

We observed that herbal enemas are frequently used as the first line of treatment by getting rid of ‘dirt’ in the body, especially in Nigeria. Although plant species used for rectal insertions in this study could not be verified, a study in West Africa reported herbs were prepared from a voucher herbarium plant and administered as enemas to treat a variety of illnesses. ¹¹ However, frequent rectal application of these herbal medicines were reported to be associated with toxicity caused by harmful ingredients, mechanical injury and infections. ¹¹ As reported in a systematic review,¹² cultural beliefs around the use of traditional
medicines have been identified as key barriers in seeking emergency obstetric care. In some studies, pregnant women preferred the TBAs who administered traditional medicines.\textsuperscript{13-15} These practices constitute a barrier to care because of the expectation that obstetric complications would resolve without medical interventions.\textsuperscript{16} Furthermore, in this study, pastors’ wives admitted pregnant women in their religious homes and administered prayers and enemas to improve pregnancy outcomes. The role of religion and religious organizations in providing care in resource-limited settings cannot be overemphasized and has been widely discussed in the literature.\textsuperscript{17-19}

The HB Model\textsuperscript{7} explains the complex health-seeking behaviour of participants in this study. For instance, participants’ beliefs about their health problems, perceived benefits of action and barriers to action explain their engagement (or lack of engagement) with the health system. The fact that health facilities were not usually visited as first line of action during illness episodes was due to concerns related to the quality of care: long waiting time, lack of equipment, drug stock-outs and unprofessional conduct of doctors and nurses. These have previously been reported elsewhere in SSA.\textsuperscript{10,20} These facility barriers could be the rationale for utilisation of PMVs despite their inappropriate medication dispensing practice which remains a threat to life and well-being of patients.\textsuperscript{21} Participants considered a visit to a PMV as a better alternative to a facility visit because of perceived benefits such as availability, acceptability, accessibility, affordability (The four “As” of Access to care) and shorter waiting time with a potential to pay for medicines in instalment.

The findings of this study must be interpreted in the light of the following limitations: the qualitative case study design of this paper examines the phenomena of access to and quality of care occurring in a bounded context of healthcare facilities which includes non-conventional institutions such as traditional and religious homes and patent medicine stores. Explanations of these phenomena were developed through eliciting lived experiences with healthcare. The qualitative method used precludes the establishment of cause and effect relationships as would be established in quantitative research. Next, the study participants were not randomly selected; hence, the study findings may not be generalised to the population from which the participants were purposively selected.

Despite these limitations, our design and methodology are well suited for the study because of the robustness of triangulating the data from healthcare users and providers; and other stakeholders. Another strength of this study lies in its ability to identify and describe the contextual factors that contribute to understanding access to and quality of healthcare in the study settings to generate recommendations for policy and practice in LMICs.

As efforts to increase coverage of primary healthcare expand globally, there is an urgent need to better understand patients’ perspectives on healthcare quality, financial, social and cultural barriers to seeking healthcare from accredited professionals. The balance of public versus private healthcare providers and the links between such systems need to be improved to address severely limited resources in primary healthcare in LMICs. Understanding and possibly incorporating traditional medical practices in primary
healthcare systems may help reduce potential for fraud and improve satisfaction with primary healthcare services.

Conclusions

We think that this is the first multi-country study to use a qualitative approach to describe contextual factors in access to and quality of primary healthcare in SSA by triangulating data from healthcare users and providers and other stakeholders. This study found a substantial gap in primary healthcare coverage and quality in the selected communities in rural and urban areas in East and West Africa. Contextual factors that contribute to understanding the challenges in access to and quality of primary healthcare for the purpose of generating recommendations for policy and practice in Nigeria, Kenya, Uganda and Tanzania have been reported in this study. Future efforts should focus on evidence-based interventions to improve access to quality primary healthcare in vulnerable populations in these countries.

List Of Abbreviations

| Abbreviation | Full meaning                      |
|--------------|-----------------------------------|
| FGD          | Focus Group Discussion            |
| HB           | Health Belief                     |
| HCU          | Health Care Utilisation           |
| HIV          | Human Immunodeficiency Virus      |
| IDI          | In-Depth Interview                |
| KII          | Key Informant Interview           |
| LMICs        | Low- and Middle-Income Countries  |
| PHC          | Primary Health Care               |
| PMV          | Patent Medicine Vendor            |
| SDGs         | Sustainable Development Goals     |
| SSA          | Sub-Saharan Africa                |
| TBA          | Traditional Birth Attendant       |
| UHC          | Universal Health Coverage         |
| WHO          | World Health Organization         |

Declarations

Ethics approval and consent to participate
Ethical approval for this study was obtained from the local Institutional Review Board at each study site. Written informed consent was obtained from the study participants. Efforts were made to guarantee anonymity by removing identifiable information.

**Consent for publication**

Not applicable

**Availability of data and materials**

The data that support the findings of this study are available from [the Bernard Lown Scholars Program in Cardiovascular Health, Department of Global Health and Population, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, U.S.A.] but restrictions apply to the availability of these data, which were used under license for the current study, and so are not publicly available. Data are however available from the authors upon reasonable request and with permission of [the Bernard Lown Scholars Program in Cardiovascular Health, Department of Global Health and Population, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, U.S.A.].

**Competing interests**

The authors declare that they have no competing interests.

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**Authors’ contributions**

SA, ADB, CO, BO, SM, SO, AM and GD designed the study. SA coded the data and drafted the manuscript. GD supervised the writing and provided feedback. All authors critically reviewed the manuscript and approved the final version.

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Figures
Figure 1

Conceptual framework for the study

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