JOURNAL OF COMMUNITY SYSTEMS FOR HEALTH
2024, VOL. 1
https://doi.org/10.36368/jcsh.v1i1.1054

ORIGINAL RESEARCH

Community participation through co-production and social accountability in Zambia: mapping primary health care actors, roles and interfaces

Joseph M Zulu[1,2,3], Aniset Kamanga[4], Lupenshyo Ngosa[4], Hilda Shakwelele[4], Winfridah Mulenga[5], Roy Chihinga[5], Adam Silumbwe[1,2*], Nikhil Wilmink[4]

[1]Department of Health Policy and Management, School of Public Health, University of Zambia, Lusaka, Zambia
[2]Center for Community Health Systems and Implementation Research, Lusaka, Zambia
[3]Department of Health Promotion and Education, School of Public Health, University of Zambia, Lusaka, Zambia
[4]Clinton Health Access Initiative, Box 51071, Lusaka, Zambia
[5]Ministry of Health, Ndeke House, P.O Box 30205, Lusaka, Zambia

***Corresponding author:** adam.silumbwe@umu.se

Received 3 May 2024; Accepted 22 October 2024; Published 14 December 2024

ABSTRACT

Introduction: Community participation is central to primary health care (PHC). However, there remains limited research on the practices of community involvement in PHC. This study aimed to inform the Zambian PHC agenda, by documenting key actors, their roles, interactions and available spaces or interfaces for engaging in community participation, as well as to identify the enabling conditions/mechanisms, and barriers underpinning community participation.

Methods: We used exploratory qualitative methods consisting semi-structured interviews with Community Health Assistants (CHAs) (n=10), healthcare workers (n=7) and traditional leaders (n=7). Additionally, focus group discussions were conducted with Neighbourhood Health Committees (NHCS) members (n=53) and community members (n=57). Data were analysed using thematic analysis.

Results: The CHAs, health workers and traditional leaders acted as the key intermediaries between health facilities and communities, driving co-production and social accountability processes. Traditional leaders and civil society organizations often served as initial catalysts of community participation, enabling the subsequent roles of the CHAs, while health centres and NHCs provided the spaces and platforms for community members to shape their involvement in participatory activities. Co-production entailed community contributions such as labour and participation in decision-making at health facilities. Social accountability took the form of suggestion boxes and informal feedback from traditional leaders. Several contextual barriers limited participation, including undefined roles for processes of community engagement, the lack of a comprehensive engagement strategy, and the exclusion of CHAs in health facility processes.

Conclusion: The CHAs and their roles, alongside those of other actors, were pivotal in supporting both co-production and social accountability processes. Strengthening community participation in primary health requires clearly defining the roles of various actors through the development of comprehensive community engagement strategies.

Keywords: Community participation, actors, co-production, social accountability, primary health care.

Abstract in Español at the end of the article

INTRODUCTION

More than 45 years post the Alma Ata Declaration, community participation remains a vital component of Primary Health Care (PHC) programming [1]. Community participation is a key principle of PHC and health systems reform [2]. It is a process through which communities are involved in producing improved health outcomes by participating in decision-making and health governance. This involvement leads to community uptake, ownership, and sustainability of health improvements [2].

Community participation can leverage community resources to enhance PHC [3,4], and extend preventive and curative health services into communities through processes of co-production [3–6]. Further, through integrated community-level approaches such as health committees, communities can also participate in monitoring and advocating for quality services, ensuring social accountability [3–7]. Low- and middle-income countries (LMICs) that have prioritized the development of robust community health systems have shown significant improvements in health [3–6,8].

However, processes of promoting community participation, including the availability of spaces for participation and profiles of actor involvement, are complex, and remain under researched [9–12]. McCoy et al (2012) for example, suggests disappointment with formal mechanisms such as health facility committees [8]. They note that the different functions performed by committees and the complexity of factors influencing functioning, makes it difficult for health systems to adopt 'one size fits all' approach to promoting community participation through committees [8]. In addition, Falisse (2021) described 'facade' or deceptive participation in Burundi partly due to local socio-political elites (politicians, faith leaders) bypassing and ignoring the committees [13].

Processes of community participation in health have a variety of purposes, including contribution to service delivery and/or responsiveness of service providers to community feedback [9–12]. These participatory processes often seek to address the conditions that contribute to poor health outcomes through making the health system more responsive and accountable to its users [11,14–16].

In this paper, we approach the pathways or mechanisms of community participation as encompassing co-production and social accountability. Co-production of health services, in the context of this study, is defined as health services that are produced jointly by citizens and the government such as health infrastructure development i.e. as a form of contribution [10,11,17]. Co-production also refers to inclusive processes in identifying local health priorities, and decisions to improve health knowledge at community levels, as well as better access to health services [10,11,17]. In the context of community worker engagement, the co-production approach can be impactful by providing a bottom-up collaborative platform of active participation, iterative feedback, knowledge generation and mutual learning [18].

Social accountability is a participatory process where community members hold public actors, including health workers, answerable for the services they provide, creating the possibility and opportunity to influence change in health services, policy and health provider behaviour [16]. Effective social accountability processes leverage partnerships and coalitions, are context-appropriate, clearly define leaders' roles and responsibilities, and ensure meaningful citizen engagement [16].

Co-production interventions and social accountability have been more successful when strategically accompanied by mutually reinforcing efforts to build state capacity to deliver responsive health services [11,14–16,19,20].

Community participation in Zambia

In Zambia, the role of community participation in PHC is firmly entrenched since the Alma Ata declaration, where one of the initial policy actions by the government was the creation of Community Health Worker (CHW) cadres [21–23]. Around 60% of Zambians live in rural areas [9], of which 46% live outside a radius of 5 km from a health facility. Like other LMICs, Zambia has also been relying on community actors and structures to help mitigate health workforce deficiencies [21,24–27].

After the proliferation of various voluntary CHWs, largely supported by NGOs, the Zambian Ministry of Health (MoH) introduced its own nationwide cadre of Community Health Assistants (CHAs) through a 2010 Community Health Worker Strategy [21,24–27]. Modelled on the Ethiopian Health Extension Worker program, CHAs differ from community health volunteers in that they have a year of standardised MoH training program and are a salaried government cadre [1]. By December 2018, there were 2,127 CHAs deployed across all of Zambia's rural districts [9].

The CHAs are supported to work with community actors such as traditional leaders, other volunteers, and CHWs [1], while also working in health facilities. They are required to spend 80% of their time on community related activities and 20% on duties at the health facility [9]. The evidence on the CHA programme mirrors the global picture on the impact of CHWs in increasing access to basic health services [28]. Within this evidence base, however, there remains limited research on the role of paid cadres of CHWs, like the CHAs, and other community actors and health committees in fostering community participation [21,24–27].

Alongside CHAs, Neighbourhood Health Committees (NHCs) and Health Centre Committees (HCC) play a critical role in facilitating the delivery of health services, especially in rural areas [9]. The NHCs and HCC have a long institutional history dating back to the now disbanded Central Board of Health era [9]. These institutions are recognised by the MoH as the way for community members to articulate health needs and for health

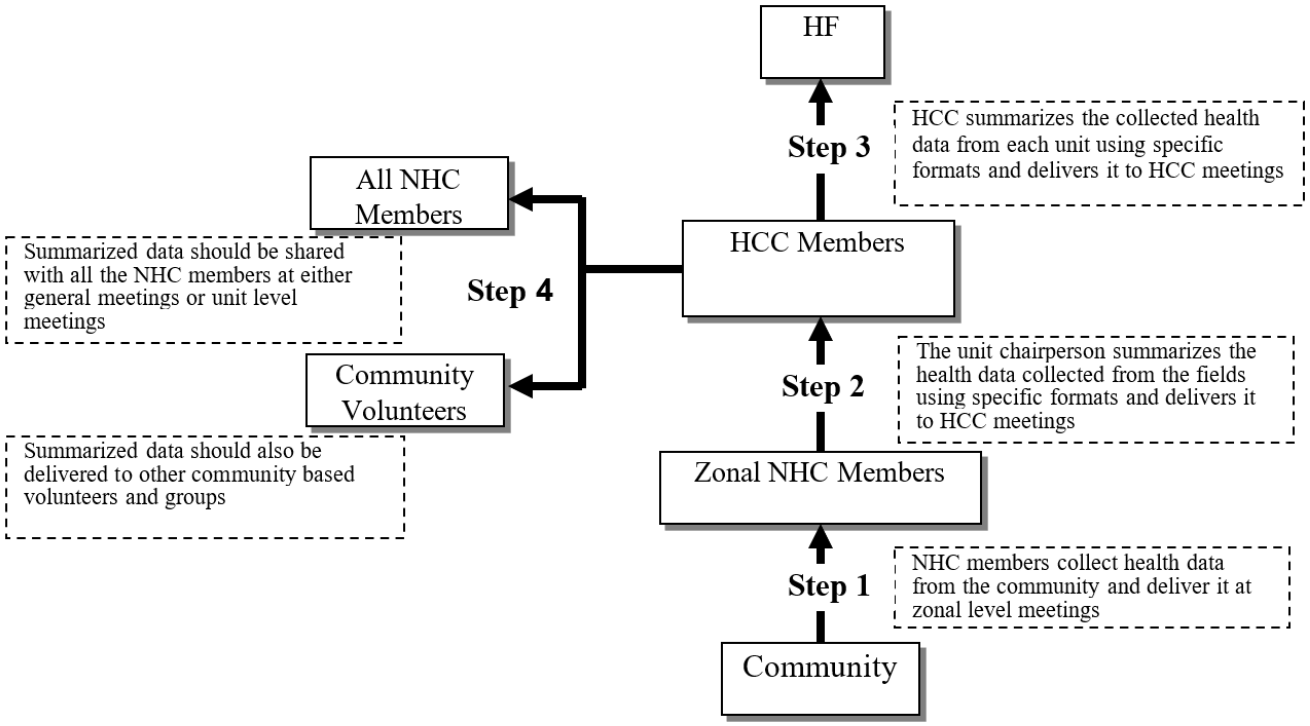

Figure 1. Community - health facility (HF) linkages and information flow in Zambia

workers to plan and monitor co-produced community health activities [1]. The MoH NHC operational guidelines outline that the primary objectives of NHCs include serving as a liaison between the health centre, district health office, and the community for all health-related matters. Additionally, they are tasked with ensuring social accountability within the community health context [9].

In rural Zambia, each health facility catchment area is divided into zones where NHCs, made up of elected community representatives, operate [9]. The chairpersons of these zonal NHCs, elected by members of the community, meet quarterly at HCCs along with health workers [9,12]. The health worker in charge of the health facility is the designated secretary of the HCC. Figure 1 below shows the community - health facility linkages and information flow in Zambia.

The emergence of intermediary actors in Zambia, such as CHAs and NHCs, along with new modes of engagement like community-led monitoring and the Community Health Strategy, has created a new dynamic and evolving PHC landscape [9].

The Zambian MoH is currently implementing PHC reforms with social accountability and community participation at their core [11,17]. The sixth National Health Strategic Plan (NHSP) 2017 – 2021, the inaugural 2017 Community Health Strategy (CHS), and the National Guidelines for Neighbourhood Health Committees (NHC) aim to implement a "transformative agenda" to empower communities to take responsibility for their own health status [9]. However, the Zambian context is characterised by a historically weak interaction between citizens and the state [9]. This lack of a rights-based dialogue means that civic accountability is more likely to take the form of 'collaborative' rather than 'contestation' actions. In Zambia, the co-production of health services can range from rapid malaria testing and immunization campaigns undertaken jointly by health workers and community volunteers, to water and sanitation projects such as pit-latrines which are built and maintained by community members with support from health workers [10].

This study aimed to inform the Zambian PHC agenda, by documenting key actors, their roles, interactions and available spaces or interfaces for engaging in community participation, as well as identify the enabling conditions/mechanisms, and barriers underpinning community participation.

METHODS

Study design

We undertook an exploratory qualitative approach to uncover the forms and dynamics of community participation and the conditions which facilitate or hinder social accountability and the co-production processes in the PHC system of Zambia [29]. The exploration entailed identifying key actors at community level, documenting their roles and interactions, the spaces within which they engage, and the mechanisms that facilitate or limit their engagement.

Sampling participants

We adopted purposeful sampling to obtain an information-rich and diverse sample of respondents. In total, 156 actors were interviewed in five health facility

catchment areas, in five districts, across three provinces. Health facilities were sampled based on set criteria including: the number of years the health facility has been operational (with older more established facilities selected); the staffing of health facilities with a CHA being present; the size of the catchment areas of health facility (population and number of zones); and the existence of 'mobilisers' such as traditional leaders or civil society organisations (CSOs). Researchers spent a week at each facility, exploring specific processes through semi-structured in-depth interviews and focus group discussions with different actor groupings.

We interviewed 10 CHAs and 7 health workers in total (Table 1). On the community side we interviewed 53 HCC and NHC members, 57 community members and 7 headmen. These groups comprised of a diverse mix of community members, including men and women of a range of ages (over 18 years). No vulnerable groups were included in the sample i.e. children, chronically ill patients and mentally challenged. Since not all health facilities had local CSOs present, only one member of a local CSO was interviewed.

Data collection

The interview guide explored six themes: 1) intermediary actors in co-production and social accountability processes; 2) catalysts for co-production and social accountability; 3) spaces for co-production and social accountability; 4) co-production activities; 5) social accountability activities and 6) contextual barriers.

Data analysis

The interviews were audio recorded and transcribed verbatim. We employed thematic analysis - an approach for identifying, analysing, and reporting patterns (themes) within data. It minimally organizes and describes a dataset in (rich) detail and goes further to interpret various aspects of the research topic [30]. The research team inductively coded the data under the six main themes (Table 2). Each transcript was coded and then reviewed together with another member of the research team to agree upon the sub-themes, ensuring inter-coder reliability. The coders periodically debriefed on emergent themes to update the code-list throughout the analysis process. Once no additional emergent themes were identified this coding structure was finalised and applied to all transcripts uniformly. Dedoose software was used to facilitate data organisation.

Table 1. Number of interviews, by type of person interviewed.

Province	District	Centre staff	CHAs	NHC	Community members	HCC	Head-men	CSO	Total
Central	Chi-bombo	1	2	12	5	2	0	0	
Central	Kapiri Mposhi	1	2	14	9	8	1	0	
Copper-belt	Masaiti	1	2	10	7	10	6	0	
Lusaka	Shibuyunji	2	2	8	26	5		1	
Central	Chisamba	2	2	9	0	6	0	0	
	Total	7	10	53	47	31	7	1	156

Ethical considerations

Ethical approval was sought from the Excellence Research Ethics & Science Converge (ERES Converge) (Ref. No. 2017-Nov-002), while permission was also obtained from the Zambia National Health Research Authority and Ministry of Health. Informed consent was provided by the participants before the interviews. Confidentiality of personal data was maintained through the use pseudonyms and identity codes on all research documents. All study-related documents were kept in a locked file cabinet in a research staff's office and on the computer, with password protection.

RESULTS

The first part of this section presents the main themes – actors, catalysts, interfaces/spaces, activities and contextual barriers to community participation – and their respective sub-themes (Table 2). The key actors included health workers, CHAs, NHCs, traditional leaders, and civil society organizations. Catalysts highlight the responsiveness of health workers and the role of traditional leaders and civil society in fostering community participation. Key interfaces and spaces are health centres and NHCs, where co-production and social accountability activities take place. However, the findings also reveal contextual barriers such as the limited definition of roles, the absence of a comprehensive community engagement strategy, and the exclusion of CHAs from some health

facility committees.

In the second part, we present a further analysis of the themes in Table 2 in four key observations regarding community participation. These observations include: (i) the role of community health assistants as a bridge between facilities and communities, (ii) health worker responsiveness as a key enabling factor, (iii) traditional leaders and civil society organizations as catalysts for co-production and social accountability, and (iv) the critical influence of health centres and neighbourhood health committees in supporting community engagement.

Community health assistants as a bridge between facilities and communities

The CHA cadre was seen as a crucial health facility actor, responsible for building relationships with communities through HCCs, NHCs, and direct household visits. CHAs were recruited from and deployed back to rural health posts within their local communities. Their job descriptions emphasized these roles, as did the CHAs themselves, who highlighted their involvement in convening meetings and responding to community needs:

> "*We resolve all the issues from different zones because that is a part on our agenda. If you go and check in our minutes there is a part which says report from each zone…each zone chairman will give a report whether infrastructure development, whether conduct of NHCs, which will be discussed by those other zones in HCCs*" (CHA, Kapiri Mposhi District)

Many facility staff reported that the introduction of CHAs as paid outreach workers led to tangible improvements, such as the construction of toilets. This change was facilitated by CHAs' ability to engage directly with community members, volunteers, and NHC members through outreach activities.

> "*When they started these CHAs, especially [in] this area, some household had no toilets but since the CHAs started this program, there are some who are having toilets*" (Health Worker-in-charge, Kapiri Mposhi District)

CHAs actively promoted community engagement through outreach programs. Overall, community members had a strong understanding of disease prevention and were motivated to improve their collective health. Many communities contributed labour and funds towards the construction of new health facilities.

> "*The community themselves are the ones that contributed for that health post to be built…per village contributing about a K400, they mould bricks, they were building, women were fetching water*" (Civil Society Representative, Shibuyunji District)

At the PHC level, accurate information on services, diseases, and demographics was crucial for efficient resource use and effective service delivery. CHAs collaborated closely with community actors such as NHCs, HCCs, and Safe Motherhood Action Groups (SMAGs) to collect data at the community level. Health workers acknowledged the well-established disease tracking mechanisms at the facility level, but at the community level, they had to rely on volunteers for data reporting.

> "*In reproductive health, we are getting that information from the SMAGs [Safe Motherhood Action Group] because they are bringing a lot of home deliveries, they are reporting to us every month…then like for malaria cases we are getting this information from the community health workers, these are just like working officers in the community*" (Health Worker in-charge, Chisamba District)

While facility health workers recognised the CHAs as key intermediaries in community health systems service delivery, the community members appeared less clear on the community engagement roles of CHAs. Moreover, the numbers of salaried CHA cadre remained low to cater for all communities. In some facilities, CHAs described not being invited to attend HCC meetings by health workers, meaning their ability to facilitate community-facility linkages was negated. This was partly due to the challenges of embedding the CHA cadre within existing PHC structures without clear MoH policy guidelines. Facilities and CHAs themselves often took it upon themselves to outline roles, responsibilities, and the teamwork needed for effective co-production.

> "*We have called up meetings so that people understand the channel of communication, who is a CHA? Who is an NHC? Who is a community member? Then we are making them understand to say health issues they need teamwork. A CHA alone cannot do anything, it's a collective battle*" (CHA Shibuyunji District)

Relying on volunteers as the backbone of community health promotion and disease prevention was problematic due to high turnover rates and a lack of standardized training. Uncompensated volunteer work was considered unsustainable. While the salaried CHA cadre was intended to address these issues, their numbers remained insufficient for covering large catchment areas with dispersed populations. As a result, many communities contributed financially to support volunteers.

> "*As a community, we sit down and propose the budget and see how much we can pay the community workers. The community raises money once a year to pay the volunteers. We pay them because there is only health worker in this community, and we pay K10 per household*" (NHC Members, Chisamba District)

The frustrations of not receiving incentives for their efforts was illustrated by the following NHC member, in Shibuyunji:

> "*Volunteers they are not given transport, [yet] they foot long distances coming to the facility…they need something to assist them… [they have] no bike… during the rainy season raincoats, gum boots are not provided in this community*" (NHC Members, Chibombo District)

Failure to adhere to preventative practices remained a barrier to community engagement and improved health outcomes. Additionally, in areas with limited engagement between facilities and communities, many community members felt disrespected, disengaged, and misunderstood.

> "*They do not know much the problems that the community has because they [health workers] don't attend the meetings*" (Community Member, Chibombo District)

Table 2. Thematic analysis framework.

Main themes	Sub-themes
Actors	• Health Workers • CHAs • NHCs • Traditional leaders • Civil society organizations
Catalysts	• Responsiveness of health workers • Role of traditional leaders in enabling community participation • Role of civil society organizations in enabling community participation
Interfaces/spaces	• Health centre • Neighbourhood Health Committees
Activities	• Co-production activities Community contributing labour Supporting the co llection of health information Actively participating in decision-making processes at the health facilities • Social accountability activities Use of suggestion boxes Engagement with traditional leaders
Contextual barriers	• Limited definition of roles during community engagement • Lack of a comprehensive community engagement strategy • Exclusion of CHAs from committees in some health facilities

Health worker responsiveness as an enabling factor

The level of responsiveness of health workers to community's needs was widely regarded as critical for enabling co-production of services. This was specifically where health workers engaged community members and CHAs as equal participants in health service delivery rather than as passive actors. These health workers were cognisant of the mutual benefits of building relationships with community groups through participatory approaches, as one of them explained.

> "*Us as a centre, we cannot work alone without the community*" (Health Worker, Masaiti District)

This awareness appeared to be a critical first step towards opening spaces for participation. It was also vital in enabling communities to be partners in problem solving and co-producing services, as explained by one health worker:

> "*Basically, what we try to do is we create a relationship where they [the community] are free to talk to us and we are free to talk to them*" (Environmental Health Technician, Shibuyunji District)

Working effectively with dispersed communities was not a simple task. It was explained that community work takes hours of planning with community structures for consensus to be built and was facilitated by sharing key data.

> "*[Firstly] the disease burden is being discussed in the HCC meeting, secondly, we look at the planned activities for the community as well as for the facility. Are there activities that were planned under community, which haven't been done? If so, why? If they are within us then we will address them, if they will need other people's hands, [we] will make a follow up*" (Health Centre incharge, Chibombo District)

Most health workers stated that the introduction of CHAs in the health facilities contributed towards

stronger relationships between themselves and community members, enabling health workers to better respond to health needs. This responsiveness increased as health workers became more aware of these needs and expectations. This awareness was particularly strong in facilities that conducted regular meetings with chosen or elected health volunteers or representatives of the community such as NHC members.

> "*They bring their needs to us, then we sit together with them, then we see a way forward*" (Health Worker, Masaiti District)

In three health facilities health workers and CHAs invested in relationships with community members and the HCCs and NHCs appeared to be able to co-produce more effective services. In addition to meetings, the relationship was promoted though regular community visits.

> "*We have people [community members] who go in the field visiting every household seeing who has a toilet and who doesn't have the basic sanitation facilities and then at the end of each month we see how many have been constructed, how many have been reconstructed and things like that*" (Health Worker, Shibuyunji District)

The participants reported a linkage between the trust in health care workers and the support and motivation to deliver PHC services. When community members were engaged as equal stakeholders or partners in PHC, there were high levels of motivation and commitment to collectively improving health services.

> "*There is this thing which they say, "scratch my back and I scratch yours". In the community I mean there are things which we can do ourselves as community, there are things which we ask from the centret*" (NHC members, Shibuyunji District)

In contrast, in two health facilities where there was weak cooperation between communities and health workers, community members complained that facilities did not hold meetings in the community. This denied them an opportunity and space to voice their needs and concerns on health services. The lack of spaces to engage with health workers, emerged as a key grievance and barrier to co-production and social accountability.

> "*We have a lot of problems in the community…we also used to tell them [health workers]. But now we don't do that because we don't know how they planned. So, we don't know how we can help*" (NHC member, Shibuyunji)

Traditional Leaders and civil society organisations as catalysts for co-production and social accountability

Generating broad-based participation around PHC among groups with different motivations requires skilled intermediaries. CSOs and traditional leaders such as headmen and chiefs were critical in this respect and often worked closely with the CHAs within communities and health facilities. Chiefs also played a critical role when issues need to be escalated. This was usually around solving disputes or enforcement of social norms.

> "*Our Chief is very influential …when we see that things are not moving, we actually ask him to call the headmen for us…then we even disseminate information to the chief then he runs it down to the headmen*" (CHA, Shibuyunji District)

In some respects, traditional leaders fulfilled the accountability void created when community-facility social accountability mechanisms such as NHCs, HCCs or complaint boxes were ineffective. It was reported that suggestion boxes for written complaints were present in all facilities, however their use was limited. Instead, community members stated they spoke directly to their headmen when they had issues concerning the facility. They attributed poor utilisation of the suggestion boxes to lack of awareness and fear that they may not be treated well by health workers if seen complaining.

The deep historical and cultural importance of traditional leaders as holders of influence and authorities underpinned their importance. Both headmen and chiefs were critical in catalysing social mobilisation towards behaviour change around health prevention often penalising those who did not adhere to health messages.

> "*The chief also came in…to say if you are not building a toilet, then we will penalise you. So now it looks like when they look at the facility it is joined with the chief…so at least we are seeing a lot of improvement now*" (NHC member, Chibombo District)

CSOs played a similar role of catalysing community engagement or co-production. However, unlike the traditional leadership, CSOs are often focused on specific health issues, tied to their funding. For example, the health worker in charge from Kapiri Mposhi narrated how a CSO was working on HIV prevention, testing and treatment:

"I think it's [the CSO] effective because…they have employed someone directly from the community. They have mobilisers in the community also they have employed some youths those who are conducting HIV tests."

> "*I think it's [the CSO] effective because…they have employed someone directly from the community. They have mobilisers in the community also they have employed some youths those who are conducting HIV tests*" (CHA, Kapiri Mposhi District)

NGOs also paid and trained community volunteers, although this could create unsustainable expectations, as outlined by the following health care worker in Chisamba:

> "*When we are doing child health week…they will expect something as their motivation hence you will see them coming. But when there is nothing? The number will be a little bit lower*" (CHA, Shibuyunji District)

Furthermore, the reliance on project and funding cycles, could sway community volunteers' attention into specific issues and neglect health areas where there was less funding. Some CSOs were, however, reported to be advocating for more structural changes, such as raising awareness about the entitlement of NHC and HCCs to receive 10% of facility grants for community outreach:

> "*[NAME OF CSO] was educating us on the part of advocacy, in fact in teaching us how we are supposed to advocate…We never knew anything about 10% [allocation from facility grant] but through [NAME OF CSO] we know the 10% which is supposed to go to the community*" (NHC member, Shibuyunji District)

Table 3. Roles of the actors.

Community Health Assistants	• Community mobilizing (including resource mobilization) • Conducting health education at community and health facility levels • Collecting community health information • Delivering health services at community and health facility levels • Participating in health priority setting/ decision making at community and health facility levels • Participating /coordinating meetings in communities and health facilities • Coordinating planning of community projects • Coordinating community volunteers • Referring patients from communities to health facilities
Health worker responsiveness	• Conducting health education at the health facility levels • Collecting health information at facility level • Delivering health services at the health facility • Coordinating health priority setting/ decision making at the health facility • Coordinating meetings in health facilities • Supervising the CHAs • Providing CHAs with medical supplies
Neighbourhood health committee/ health centre committee members	• Supporting CHAs in collecting health information at community level • Supporting CHAs in delivering health education at community level • Participating in health priority setting/ decision making at health facility and community levels • Participating in meetings in health facilities • Supervising CHAs
Traditional leaders	• Mobilizing resources for undertaking health projects in the community • Coordinating meetings in communities • Coordinating community projects • Supporting CHAs in undertaking community level activities • Coordinating community level social accountability activities on health
Civil Society Organizations	• Building the capacities of health facilities and communities in undertaking social accountability • Funding health and social accountability processes

The role of health centre and neighbourhood health committees

Committees (HCCs and NHCs) played a key role in shaping community participation and social accountability. NHCs were generally perceived as valuable citizen-state interfaces by facility staff. CHAs highlighted the role of these committees in ensuring social accountability for equitable health services, specifically in engaging traditional leaders to safeguard that powerful individuals did not affect the equitable access to services for communities. In one health facility, the NHCs helped in mobilising resources for constructing health facilities.

> "*[When] we started that zone 2 years ago, they were no toilets but now there are toilets those nice ones' VIP [Ventilation Improved Pit] toilets they are there now, and it was because of these committees. They kept pushing and encouraging them to have toilets*" (NHC Member, Chibombo District)

The NHCs were described as platforms that linked the communities and health workers. Community used the committees to communicate their health needs and concerns regarding the quality of health services. Health workers also drew on these committees to respond to concerns, and to request support and health information from the community.

> *"[They are NHCs] the bridge between us and the community so if the community needs something from us, they will go to the NHCs and the NHCs will bring it to us. And if we need something from the community, we inform the NHCs and the NHCs will take it to the community"* (Health Worker, Shibuyunji District)

The HCCs had a stronger advisory and accountability role in the health centre, due to their joint facility and community membership. This made it a unique space for co-decision making about service delivery and effective use of resources. In some instances, HCCs were viewed as able to hold the facility and districts health offices (DHOs) accountable to improve the quality of health facilities.

> *"They [HCC] pushed the [facility] in charge, the DHO …wanting those beds that were damaged to be worked on, by this time at least you would find three [beds] in each ward"* (CSO member, Shibuyunji district)

Despite these positive instances, there were situations where health workers did not engage community representatives as partners in decision making. This undermined the mandate and effectiveness of HCCs and NHCs forums for community participation. A health worker from Shibuyunji district outlined how upon being posted to a health facility, they found the HCCs and NHCs were completely defunct.

> *"It was dead…I went to [Health Facility name] in April…the NHCs where down and you know without the NHCs there wouldn't be an HCC"* (Health Worker, Shibuyunji District)

Additionally, it was reported that some health workers lacked faith in the utility of these committees. Some health workers complained about the lack of clear guiding documents to help facilities, HCCs and NHCs to run effective facility-community committees.

> *"Sometimes they do it on their own [perform HCC functions], they provide their own leadership, [but] we don't have the guidelines so it's difficult at times"* (In-Charge, Chisamba District)

Table 3 summarises the roles of the different actors.

DISCUSSION

This study aimed to document actors and their roles, interactions and available spaces or interfaces for engaging in community participation as well as identify the enabling conditions/mechanisms, and barriers underpinning community participation. We found that co-production and social accountability for health services at this level rested upon the strength of relationships between health workers and the community and its representatives. We showed the key intermediary roles played by CHAs, along with other actors such as health workers, NHC members and traditional leaders. Our study aligns with findings from other studies reporting that when community members are engaged as equal partners by responsive health workers, there is likely to be strong motivation and desire to contribute to the collective wellbeing [31–33].

Within Zambia, there is strong evidence of the power of traditional leaders to shaping health seeking behaviour [34]. Similarly, traditional leaders in other settings such as Zimbabwe and Malawi also played pivotal roles in supporting utilization of HIV and maternal and child health services through mobilization for health promotion campaigns, and encouraging community members to access services [35,36]. Although the role of the traditional leaders was often positive, in Malawi, some of them were criticized for engaging in a coercive manner [36].

The CHAs also strengthened the delivery of health information and services in the community by collaborating and supporting other volunteers. The impact of national community-based workers in coordinating, building capacity, and providing technical support to volunteers working at the community level has been documented regionally [22,28,37,38]. In Ethiopia, health extension workers for example developed action plans for volunteers, which are submitted to and approved by the village council before implementation [38]. Our findings reaffirmed previous research in Zambia documenting CHAs interaction and collaboration with a wide range of volunteers, including malaria control agents, growth-monitoring promoters, Safe Motherhood Action Groups and Neighbourhood Health Committee [21,24–27]; and the extent to which the facilitator role of CHAs was valued [26].

However, staffing shortages at health facilities affected CHAs' ability to contribute to social accountability and co-production in PHC. As with previous studies, limited staff meant that CHAs rarely spent the 80% mandated time at the community level, undermining community engagement processes. Furthermore, the lack of clear guidelines to structure community engagement hindered the multiplier effect as CHAs worked with a large community health volunteer workforce. This was partly due to the challenges of embedding the CHA cadre within existing PHC structures without clear MoH policy guidelines on how to do so. Exclusion of CHAs in HCC meetings by health workers, under-

mined community-facility linkages. Finally, the lack adequate incentives for other community health workers who worked as volunteers also affected the ability by those volunteers to support the CHAs in undertaking social mobilization and delivering other community level services. Many of these constraints have been documented in previous studies [21,24–27], and we agree that viewing community participation as a panacea to solve health issues, while neglecting the contextual conditions that could facilitate or constrain effective engagement can undermine co-production of services [5].

The health facilities provided a critical engagement space for the different actors to be involved in social accountability and co-production processes. HCCs and NHCs were the 'interface' spaces within PHC in Zambia where state and citizens representatives convened to deliberate, plan, and find solutions regarding co-production and social accountability. As demonstrated in other settings, such committees have the potential for improving communication channels, and can promote co-production of health services through promoting trust among different actors in the community [17,39]. The literature is clear on the necessity of citizen-state interface for social accountability processes to emerge [11,22]. Evidence highlights the role that such spaces play as sources of collective power to improve community health [40,41]. Further, these relational approaches to strengthening community engagement are vital in shaping co-production and social accountability as they provide an opportunity to accommodate diverse actors, interests and expressions of power in the delivery of PHC in community health systems [3,9,42]. These spaces can also enhance cohesion in delivering primary health care by promoting shared communication and understanding of community health needs and resources [43,44].

Effective community engagement relies on health information that serves as a catalyst, particularly in promoting health facility responsiveness in areas such as planning and performance. This information acts as a lever for social accountability [40]. In the Zambia community health care context, processed and analysed health information remains largely inaccessible to community groups, who are used simply to report raw data upwards to health workers [21,24–27]. These findings mirror the regional evidence on the imbalance of the information flow between the health facility and the community structures [45,46]. Moreover, it also reveals a worryingly lack of community ownership of their own data. Information often forms a common platforming for engagement between the state and the citizenry, which is necessary for any accountable and responsive system [40].

Finally, this study builds on other literature that demonstrated that the use of community based actors and structures in the delivery of primary health care can enhance adoption and acceptability through increased involvement of communities in primary health care services [47]. By enabling co-production and local social accountability, community-engagement can also improve implementation penetration and sustainability of services [3,48]. These locally coordinated actions (co-production and local accountability process), within the communities, are often the ultimate factors ensuring sustainability of community health systems [9,14,20].

Conclusion

This study sought to contribute to the growing literature on community participation through co-production and social accountability in primary health care. The CHAs and traditional leaders played variable set of roles as intermediaries between facilities and communities, driving co-production and social accountability processes, with CHAs being the main actors. Traditional leaders and civil society organizations often served as catalysts of community participation by providing enabling environment for CHAs to undertake their duties. Health centres and NHCs supported co-production and social accountability processes by providing venues and platforms for community members to participate in health activities. The strength of these relationships determined the quality of co-production and accountability for health services. Meanwhile, undefined community engagement roles, a lack comprehensive engagement strategy, and CHAs' exclusion from committees in health facilities affected co-production and social accountability processes. Our findings thus highlight the importance of strengthening relationships between communities and facilities in a sustainable manner, including to develop comprehensive and clear guidelines on community engagement in the Zambian primary health care system.

DECLARATIONS

Publication Consent

Not required.

Competing interests

None.

Funding

This work was supported by a scholarship funded by Clinton Health Access Initiative (CHAI).

Author contributions

JMZ, AK, LN and NW contributed towards the design of the study including the data collection tools and collecting data. JMZ, AK, LN and NW participated in analysing of the results of the study. All the authors contributed towards the revision of analysis of the results, the draft manuscript, and approved the final manuscript.

Data availability

The raw data generated and/or analysed during the current study are not publicly available but they could be from the corresponding author on reasonable request.

Acknowledgements
We would like to extend our sincere gratitude to the study participants for their time and valuable insight/input during the interviews.

ORCIDs
Joseph M Zulu 0000-0003-1480-4977
Aniset Kamanga 0000-0003-2994-2459
Lupenshyo Ngosa 0000-0002-0615-6247
Adam Silumbwe 0000-0002-1905-5293

Participación comunitaria a través de la coproducción y la responsabilidad social en Zambia: mapeo de agentes, roles e interfaces en la atención primaria de salud

RESUMEN

Introducción: La participación comunitaria constituye un pilar esencial en la atención primaria de salud (APS). No obstante, las investigaciones acerca de las prácticas de participación comunitaria en este ámbito son escasas. Este estudio tiene como objetivo enriquecer la agenda de la APS en Zambia mediante la documentación de actores clave, sus roles, interacciones y los espacios o interfaces disponibles para la participación comunitaria. Además, busca identificar las condiciones y mecanismos que facilitan, así como las barreras que obstaculizan, dicha participación.
Métodos: Se emplearon métodos cualitativos exploratorios, incluyendo entrevistas semiestructuradas a asistentes sanitarios comunitarios (ASC) (n=10), trabajadores sanitarios (n=7) y líderes tradicionales (n=7). Se organizaron también grupos de discusión con miembros de los comités de salud de barrio (CSB) (n=53) y miembros de la comunidad (n=57). Los datos fueron analizados a través del análisis temático.
Resultados: Los ASC, los trabajadores sanitarios y los líderes tradicionales sirvieron como intermediarios clave entre los centros de salud y las comunidades, fomentando los procesos de coproducción y responsabilidad social. Los líderes tradicionales y las organizaciones de la sociedad civil frecuentemente actuaron como catalizadores de la participación comunitaria, facilitando las funciones subsiguientes de los ASC. Por su parte, los centros de salud y los CSB proporcionaron los espacios y plataformas para que los miembros de la comunidad configuraran su involucración en actividades participativas. La coproducción implicó contribuciones comunitarias tales como la mano de obra y la participación en la toma de decisiones dentro de los centros sanitarios. La responsabilidad social se manifestó a través de buzones de sugerencias y retroalimentación informal de los líderes tradicionales. Varias barreras contextuales, como la ambigüedad en las funciones dentro de los procesos de participación comunitaria, la falta de una estrategia de participación integral y la exclusión de los ASC de los procesos de los centros sanitarios, limitaron la participación.
Conclusiones: Las funciones de los ASC, junto con las de otros actores, resultaron fundamentales para apoyar tanto los procesos de coproducción como los de responsabilidad social. Para fortalecer la participación comunitaria en la atención primaria de salud, es imprescindible definir claramente las funciones de los distintos actores mediante el desarrollo de estrategias integrales de participación comunitaria.

Palabras clave: Participación comunitaria, actores, coproducción, responsabilidad social, atención primaria de salud.

REFERENCES

[1] Zulu JM, Kinsman J, Michelo C, Hurtig AK. Developing the national community health assistant strategy in Zambia: a policy analysis. Health Research Policy and Systems. 2013 Dec;11:1-3.

[2] Rifkin SB. Examining the links between community participation and health outcomes: a review of the literature. Health policy and planning. 2014 Sep 1;29(suppl_2):ii98-106.

[3] Schneider H, Olivier J, Orgill M, Brady L, Whyle E, Zulu J, San Sebastian M, George A, Collective TC. The multiple lenses on the community health system: implications for policy, practice and research. International Journal of Health Policy and Management. 2022 Jan;11(1):9.

[4] Michelo C, Hurtig AK, Schneider H. Working towards inclusive, socially accountable and resilient community health systems: an introduction to a special issue. International Journal of Health Policy and Management. 2022 Jan;11(1):1.

[5] George AS, LeFevre AE, Schleiff M, Mancuso A, Sacks E, Sarriot E. Hubris, humility and humanity: expanding evidence approaches for improving and sustaining com-

munity health programmes. BMJ Global Health. 2018 Jun 1;3(3):e000811.

[6] Perry HB, Zulliger R, Rogers MM. Community health workers in low-, middle-, and high-income countries: an overview of their history, recent evolution, and current effectiveness. Annual Review of Public Health. 2014 Mar 18;35(1):399-421.

[7] Hodgins S, Kok M, Musoke D, Lewin S, Crigler L, LeBan K, Perry HB. Community health workers at the dawn of a new era: 1. Introduction: tensions confronting large-scale CHW programmes. Health Research Policy and Systems. 2021 Oct;19:1-21.

[8] McCoy DC, Hall JA, Ridge M. A systematic review of the literature for evidence on health facility committees in low-and middle-income countries. Health Policy and Planning. 2012 Sep 1;27(6):449-66.

[9] Zulu JM, Chavula MP, Silumbwe A, Munakampe MN, Mulubwa C, Zulu W, Michelo C, Schneider H, Lehmann U. Exploring politics and contestation in the policy process: the case of Zambia's contested community health strategy. International Journal of Health Policy and Management. 2022 Jan;11(1):24.

[10] Ostrom E. Crossing the great divide: Coproduction, synergy, and development. World Development. 1996 Jun 1;24(6):1073-87.

[11] Schaaf M, Topp SM, Ngulube M. From favours to entitlements: community voice and action and health service quality in Zambia. Health Policy and Planning. 2017 Jul 1;32(6):847-59.

[12] Zulu JM, Kinsman J, Michelo C, Hurtig AK. Hope and despair: community health assistants' experiences of working in a rural district in Zambia. Human Resources for Health. 2014 Dec;12:1-4.

[13] Falisse JB, Nkengurutse H. Citizens committees and local elites: elite capture, captured elites, and absent elites in health facility committees. The European Journal of Development Research. 2022 Jun;34(3):1662-83.

[14] Schneider H, Zulu JM, Mathias K, Cloete K, Hurtig AK. The governance of local health systems in the era of Sustainable Development Goals: reflections on collaborative action to address complex health needs in four country contexts. BMJ Global Health. 2019 Jun 1;4(3):e001645.

[15] Lodenstein E, Dieleman M, Gerretsen B, Broerse JE. A realist synthesis of the effect of social accountability interventions on health service providers' and policymakers' responsiveness. Systematic Reviews. 2013 Dec;2:1-0.

[16] Danhoundo G, Nasiri K, Wiktorowicz ME. Improving social accountability processes in the health sector in sub-Saharan Africa: a systematic review. BMC Public Health. 2018 Dec;18:1-8.

[17] Topp SM, Sharma A, Chileshe C, Magwende G, Henostroza G, Moonga CN. The health system accountability impact of prison health committees in Zambia. International Journal for Equity in Health. 2018 Dec;17:1-3.

[18] Cepiku D, Giordano F. Co-Production in Developing Countries: Insights from the community health workers experience. Public Management Review. 2014 Apr 3;16(3):317-40.

[19] Liberato SC, Brimblecombe J, Ritchie J, Ferguson M, Coveney J. Measuring capacity building in communities: a review of the literature. BMC Public Health. 2011 Dec;11:1-0.

[20] Schneider H, Lehmann U. From community health workers to community health systems: time to widen the horizon?. Health Systems & Reform. 2016 Apr 2;2(2):112-8.

[21] Wintrup J. Health by the people, again? The lost lessons of Alma-Ata in a community health worker programme in Zambia. Social Science & Medicine. 2023 Feb 1;319:115257.

[22] Scott K, Beckham SW, Gross M, Pariyo G, Rao KD, Cometto G, Perry HB. What do we know about community-based health worker programs? A systematic review of existing reviews on community health workers. Human Resources for Health. 2018 Dec;16:1-7.

[23] Kok MC, Kane SS, Tulloch O, Ormel H, Theobald S, Dieleman M, Taegtmeyer M, Broerse JE, de Koning KA. How does context influence performance of community health workers in low-and middle-income countries? Evidence from the literature. Health research Policy and Systems. 2015 Dec;13:1-4.

[24] Shelley KD, Belete YW, Phiri SC, Musonda M, Kawesha EC, Muleya EM, Chibawe CP, van den Broek JW, Vosburg KB. Implementation of the community health assistant (CHA) cadre in Zambia: a process evaluation to guide future scale-up decisions. Journal of Community Health. 2016 Apr;41(2):398-408.

[25] Keller B, McCarthy E, Bradford Vosburg K, Musonda M, Mwila J, van den Broek JW, Walsh FJ. Task-shifting impact of introducing a pilot community health worker cadre into Zambia's public sector health workforce. PLoS One. 2017 Aug 2;12(8):e0181740.

[26] Zulu JM, Hurtig AK, Kinsman J, Michelo C. Innovation in health service delivery: integrating community health assistants into the health system at district level in Zambia. BMC Health Services Research. 2015 Dec;15:1-2.

[27] Biemba G, Yeboah Antwi K, Vosburg KB, Prust ML, Keller B, Worku Y, Zulu H, White E, Hamer DH. Effect of deploying community health assistants on appropriate treatment for diarrhoea, malaria and pneumonia: Quasi experimental study in two districts of Zambia. Tropical Medicine & International Health. 2016 Aug;21(8):985-94.

[28] Zulu JM, Perry HB. Community health workers at the dawn of a new era. Health Research Policy and Systems. 2021 Oct;19:1-5.

[29] Stebbins RA. Exploratory research in the social sciences. Sage; 2001.

[30] Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006 Jan 1;3(2):77-101.

[31] George AS, Scott K, Mehra V, Sriram V. Synergies, strengths and challenges: findings on community capability from a systematic health systems research literature review. BMC Health Services Research. 2016 Nov;16:47-59.

[32] Tuba M, Sandoy IF, Bloch P, Byskov J. Fairness and legitimacy of decisions during delivery of malaria services and ITN interventions in Zambia. Malaria Journal. 2010 Dec;9:1-3.

[33] Byskov J, Marchal B, Maluka S, Zulu JM, Bukachi SA, Hurtig AK, Blystad A, Kamuzora P, Michelo C, Nyandieka LN, Ndawi B. The accountability for reasonableness approach to guide priority setting in health systems within limited resources–findings from action research at district level in Kenya, Tanzania, and Zambia. Health Research Policy and Systems. 2014 Dec;12:1-9.

[34] Hamer DH, Herlihy JM, Musokotwane K, Banda B, Mpamba C, Mwangelwa B, Pilingana P, Thea DM, Simon JL, Yeboah-Antwi K, Grogan C. Engagement of the community, traditional leaders, and public health system in the design and implementation of a large community-based, cluster-randomized trial of umbilical cord care in Zambia. The American Journal of Tropical Medicine and Hygiene. 2015 Mar 3;92(3):666

[35] Marashe J. The African traditional religious landscape: An examination of the role of traditional leaders in the fight against HIV and AIDS in Chipinge, Zimbabwe. Verbum et Ecclesia. 2014 Jan 1;35(1):1-8.

[36] Walsh A, Matthews A, Manda-Taylor L, Brugha R, Mwale D, Phiri T, Byrne E. The role of the traditional leader in implementing maternal, newborn and child health policy in Malawi. Health Policy and Planning. 2018 Oct 1;33(8):879-87.

[37] Kok MC, Ormel H, Broerse JE, Kane S, Namakhoma I, Otiso L, Sidat M, Kea AZ, Taegtmeyer M, Theobald S, Dieleman M. Optimising the benefits of community health workers' unique position between communities and the health sector: a comparative analysis of factors shaping relationships in four countries. Global Public Health. 2017 Nov 2;12(11):1404-32.

[38] Zulu JM, Kinsman J, Michelo C, Hurtig AK. Integrating national community-based health worker programmes into health systems: a systematic review identifying lessons learned from low-and middle-income countries. BMC Public Health. 2014 Dec;14:1-7.

[39] Westhorp G, Walker B, Rogers P, Overbeeke N, Ball D, Brice G. Enhancing community accountability, empowerment and education outcomes in low and middle-income countries: A realist review. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. 2014 May.

[40] Grandvoinnet H, Aslam G, Raha S. Opening the black box: The contextual drivers of social accountability. World Bank Publications; 2015 Apr 17.

[41] Haricharan HJ, Stuttaford M, London L. The role of community participation in primary health care: practices of South African health committees. Primary Health Care Research & Development. 2021 Jan;22:e31.

[42] Maritim P, Chewe M, Munakaampe MN, Silumbwe A, Sichone G, Zulu JM. Applying community health systems lenses to identify determinants of access to surgery among mobile & migrant populations with hydrocele in Zambia: A mixed methods assessment. PLOS Global Public Health. 2023 Jul 18;3(7):e0002145.

[43] Bartley L, Metz A, Fleming WO. What implementation strategies are relational? Using Relational Theory to explore the ERIC implementation strategies. Frontiers in Health Services. 2022 Oct 17;2:913585.

[44] Metz A, Kainz K, Boaz A. Intervening for sustainable change: Tailoring strategies to align with values and principles of communities. Frontiers in Health Services. 2023 Jan 18;2:959386.

[45] Gilson L, Barasa E, Nxumalo N, Cleary S, Goudge J, Molyneux S, Tsofa B, Lehmann U. Everyday resilience in district health systems: emerging insights from the front lines in Kenya and South Africa. BMJ Global Health. 2017 Jul 1;2(2):e000224.

[46] Few R, Harpham T, Atkinson S. Urban primary health care in Africa: a comparative analysis of city-wide public sector projects in Lusaka and Dar es Salaam. Health & Place. 2003 Mar 1;9(1):45-53.

[47] Schlechter CR, Del Fiol G, Lam CY, Fernandez ME, Greene T, Yack M, Schulthies S, Nelson M, Bohner C, Pruhs A, Siaperas T. Application of community–engaged dissemination and implementation science to improve health equity. Preventive Medicine Reports. 2021 Dec 1;24:101620.

[48] Zulu JM, Maritim P, Silumbwe A, Halwiindi H, Mubita P, Sichone G, Mpandamabula CH, Shamilimo F, Michelo C. Unlocking trust in community health systems: lessons from the lymphatic filariasis morbidity management and disability prevention pilot project in Luangwa District, Zambia. International Journal of Health Policy and Management. 2022 Jan;11(1):80.