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Health facility management and access: a qualitative analysis of challenges to seeking healthcare for children under five in Uganda

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Abstract

While several studies have documented the various barriers that caretakers of children under five routinely confront when seeking healthcare in Uganda, few have sought to capture the ways in which caretakers themselves prioritize their own barriers to seeking services. To that end, we asked focus groups of caretakers to list their five greatest challenges to seeking care on behalf of children under five. Using qualitative content analysis, we grouped responses according to four categories: (1) geographical access barriers; (2) facility supplies, staffing, and infrastructural barriers; (3) facility management and administration barriers (e.g. health worker professionalism, absenteeism and customer care); and (4) household barriers related to financial circumstances, domestic conflicts with male partners and a stated lack of knowledge about health-related issues. Among all focus groups, caretakers mentioned supplies, staffing and infrastructure barriers most often and facility management and administration barriers the least. Caretakers living furthest from public facilities (8-10 km) more commonly mentioned geographical barriers to care and barriers related to financial and other personal circumstances. Caretakers who lived closest to health facilities mentioned facility management and administration barriers twice as often as those who lived further away. While targeting managerial barriers is vitally important—and increasingly popular among national planners and donors-it should be done while recognizing that alleviating such barriers may have a more muted effect on caretakers who are geographically harder to reach - and by extension, those whose children have an increased risk of mortality. In light of calls for greater equity in child survival programming - and given the limited resource envelopes that policymakers often have at their disposal - attention to the barriers considered most vital among caretakers in different settings should be weighed.

Keywords: Barriers to care, care seeking, distance, efficiency, equity, facility management, financial barriers, geographical barriers, social accountability, Uganda

Key Messages

- Barriers to seeking care from a caretakers' perspective can be broadly categorized into (1) geographical access barriers;
 (2) facility commodities, staffing, and infrastructural barriers;
 (3) facility management and administration barriers; and (4) household barriers related to financial circumstances, domestic conflicts with male partners, or a stated lack of knowledge about health-related issues.
- Most barriers mentioned involved either poor or inadequate facility supplies, staffing, or infrastructure, or geographical access barriers.
- Understanding how people identify and describe their own barriers to care-seeking is important not only as a way to
 better understand which barriers have potentially formidable implications from the perspective of users themselves, but
 also as a way for national planners and donors to set priorities.

Introduction

The principles that animated the Alma-Ata Declaration of 1978 continue to be a touchstone for many of the policies and programs that drive primary healthcare throughout the world. Almost four decades ago, the declaration emphasized not only 'the right and duty [of people] to participate individually and collectively in the planning and implementation of their health care' but also the importance of addressing the 'existing gross inequality' that persists both between countries and within them (WHO 1978).

In Uganda, these overriding principles have been domesticated in a number of policy documents. The Second National Health Policy (Ministry of Health Uganda 2010), for instance, envisions a health system that 'adopts a client-cantered approach with consideration of both the supply and demand side of health care', while affirming the government's commitment to equity by 'ensur[ing] equal access to the same health services for individuals with the same health conditions' (Ministry of Health Uganda 2010).

Within the arena of under-five health, the government is still striving to meet these goals. Approximately 64 out of 1,000 children under the age of five in Uganda die each year of illnesses that are largely preventable or treatable, such as diarrhoea, pneumonia, malaria and other diseases that can be eliminated through the administration of timely vaccines (UBOS and ICF 2017). The Uganda Demographic and Health Survey 2011 highlights a number of persistent socioeconomic and demographic disparities in mortality, from a sizable urban-rural divide (77:111 deaths per 1000 live births) to various regional and wealth disparities (UBOS and ICF 2012).

While a number of studies have documented the general barriers to care that patients and caretakers of children under five confront in Uganda (Mbonye 2003; Golooba-Mutebi 2005; Mbonye et al. 2006; Kiwanuka et al. 2008;), data on the ways in which caretakers themselves prioritize their own barriers to care are relatively thin. Accordingly, this study asked caretakers to list their five greatest challenges to seeking and receiving healthcare on behalf of children under five. Among other things, understanding the ways in which caretakers prioritize their most formidable challenges to careseeking may temper expectations about the potential benefits and limitations of initiatives whose main outcomes don't address the barriers that many caretakers themselves highlight as the most urgent. Understanding how caretakers prioritize their own barriers is also an important step in the process of actualizing the client-cantered approach that the Government of Uganda has put forward within its own policies.

In analyzing the findings, we were particularly interested in how caretaker priorities might inform on-going discussions about the benefits of improved management and administration in health service delivery. Over the past decade, reports in Uganda on inefficiencies in the procurement, storage, and distribution of health commodities have proliferated alongside studies that document low labour productivity and weak supervision, with estimates of vast amounts of money lost that might otherwise have been put to productive use (Nakyanzi et al. 2010; Okwero 2010). The government's response to such findings has been to codify the importance of 'strengthen[ing] the organization and management of the national health system' - a policy objective present in both the second National Health Policy and the National Development Plan (2010/ 11-2014/15) (Government of Uganda 2010; Ministry of Health Uganda 2010). The two documents also include a similar strategy of 'increase[ing] motivation, productivity, performance, integrity and ethical behaviour of human resource[s] through the development and efficient utilization of the health workforce'. Given these priorities, we paid special attention to those barriers mentioned by caretakers that could potentially be mitigated through improvements in the management and administration of health services, especially at the facility level.

Barriers related to geographical distance were also of particular interest to us. Within Uganda, up to 48.3% of rural women between the ages of 15 and 49 report distance-related barriers to accessing health care (UBOS and ICF 2012). However, disparities abound even within rural areas, especially when gauging the distance of individual households to the nearest health facility (Okwaraji et al. 2012; O'Connell et al. 2015). Indeed, recent research on the impact of geographical access to facilities as a contributor to growing inequity, particularly in areas where public health facilities are few, suggests that simply documenting urban–rural disparities, or even regional disparities, is no longer enough (Victora et al. 2003; Mulholland et al. 2008). A more comprehensive approach is needed, one that begins with understanding the views and priorities of caretakers themselves.

Methods

This study used Focus Group Discussions (FGDs) to capture caretaker experiences in accessing services for children under five in rural Uganda. Our research team conducted a total of 36 FGDs with caretakers of children under five in 12 districts in Uganda in 2014 (Alebtong, Apac, Bugiri, Buhweju, Buvuma, Iganga, Kamuli, Kasese, Maracha, Masindi, Mitooma and Sheema). The participating districts were part of an ongoing operational research project called Community and District Empowerment for Scale-up (CODES) (Katahoire et al. 2015), which was designed to increase the utilization of services by and for children under five in Uganda. Under the auspices of CODES, the participating districts were

purposefully selected to represent Uganda's major geographical regions. The original study included an additional four districts (Waiswa et al. 2016), but some of the villages targeted in these districts did not meet our criteria for geographical distance and were thus removed from the data set.

Study sample

Within each district, we conducted three FGDs at varying distances from a midlevel public health facility, usually a health centre III. (Within Uganda's system of care, health centre IIIs are supposed to be staffed with one senior clinical officer, one clinical officer, one nursing officer, two midwives, three nurses, two nursing aides, one lab technician, one lab assistant and one health assistant. In practice, however, staffing levels are rarely at full capacity. According to Uganda's Ministry of Finance, Planning and Economic Development, as of May 2013, 40% of all positions at health centre IIIs were vacant, although since that time, the Government of Uganda has increased its hiring of facility staff [Ministry of Finance Planning and Economic Development 2013].)

To identify the facilities to serve as the focal points for the FGDs, we consulted the District Health Officer (DHO) and members of the District Health Team (DHT) within each district. Criteria for facility selection included those that were treating high numbers of children who presented with diarrhoea, pneumonia, or malaria, which are among the leading causes of mortality in children under five in Uganda (UBOS and ICF 2012).

Once a facility was identified, our research team then travelled to the unit to meet with its 'in-charge', who helped identify three villages whose residents use the facility - one within 3-5 km of the facility, one within 5-7 km and one within 8-10 km. The purpose of grouping the villages by distance was to tease out whether and how geography and the attending barriers of transportation were somehow linked to the ways in which people discussed the facility and its services. In terms of distance stratification, we opted for villages that were 3-5 km from the nearest facility (as opposed to, say, 0-5 km) because we wanted the views of caretakers who lived within what the government considers to be an accessible distance to a health facility (5 km), but weren't so close to the facility that they might have other interactions or relationships with health workers outside the facility, perhaps through petty commerce or religious services. In using FGDs, the goal was to better understand, as much as possible, the views of caretakers whose interactions with service providers occurred entirely through the care-seeking process.

During the village selection process, our research team also worked with the in-charge to ensure that the villages selected had limited geographical access to private health facilities, as well. However, there were instances in which some villages that were chosen – especially those that were further than 5 km from the nearest public facility – had access to private clinics whose geographical distance was comparable to the nearest public facility. Additionally, the ubiquity of pharmacies/drug shops throughout rural Uganda meant that many of our respondents had access to these establishments within a 5 km radius of their homes. That said, access to drug shops was not considered a substitute for access to public facilities. Within much of rural Uganda, drug shops operate with little oversight from the district, which frequently renders the services and treatments they dispense of sub-optimal quality (Awor et al. 2012).

Through the assistance of community extension workers (called 'Village Health Teams', or VHTs, in Uganda) and village-level local government representatives, eight to ten women who were caretakers of children under five were purposively constituted into a

focus group discussion. Women were preferred because of their role in providing physical care to children under five in rural communities throughout the country. To be selected, each caretaker had to have had at least one child under five suffering a bout of diarrhoea, pneumonia or malaria within a 3-month window prior to data collection.

Data collection and management

The number of research assistants deployed to collect data was four per district, for a total of 48. They had prior experience in qualitative data collection and were deployed to districts where they were fluent in the area's languages. They were trained over a period of 2 days about the goals of the study, the use of focus group discussions, how to facilitate them objectively, and their ethical obligations as research assistants. The FGD guides used in the study were derived from tools used during an earlier exploratory phase of the CODES project, where methods were piloted and pretested. Each FGD discussion was assigned a note-taker and a moderator. Each FGD lasted between 45 and 90 min. On a daily basis, data collectors had debriefing meetings with field supervisors to review progress, make adjustments if necessary and plan for the next day. FGDs were convened in facilities available for public use, for example, church buildings, classrooms, health facilities or sometimes under trees. The main consideration when selecting a venue was presence of minimal distractors. Data collection in each district took a total of 6 days.

All the FGDs were tape-recorded, translated and transcribed to text verbatim by the data collectors from the language in which they were conducted into English. The transcripts were later typed into MS Word and reviewed by the research team to ensure that issues and questions of interest were discussed and captured. Having read through the transcripts, there were certain instances in which probing within FGDs was deemed to have been insufficient. In such cases, data collectors returned to the field to conduct new FGDs.

Coding and analysis

Transcripts were coded and analysed using content analysis by the authors from Advocates Coalition for Development and Environment, with the help of a data analysis guide that was developed to ensure consistency in coding. The implementation team used Atlas.ti to create query reports of major themes within each district's data set, discussing and conferring with each other periodically to ensure inter-coder reliability and cross-district continuity. Manual analysis was undertaken of a specific key question within the transcript that asked focus groups to list their five greatest barriers to seeking services. The question was worded as follows: 'As a group, I'd like you to rank the five biggest challenges that parents and caretakers face in your community when they try and seek health care for their children. These should be the top five things that may cause some parents to delay taking their children for treatment'. While we initially intended respondents to provide a ranking of barriers based on a 5-point scale, a number of FGDs grouped them without the ranking. Because of this, all findings have been represented without regard for internal ranking.

We used content analysis to locate and interpret patterns in focus group responses, with special attention paid to geographical distance and the kinds of efficiency-related barriers (specifically concerning facility management and administration) that were identified by the Government of Uganda in its Second National Health Policy and National Development Plan. Once the data were grouped by themes, we counted the frequency of codes, not to make statistical inferences or generalize the frequencies to a larger

population, but to uncover patterns in the data (Downe-Wamboldt 1992; Cavanagh 1997; Hsieh and Shannon 2005; Vaismoradi et al. 2013). We were especially interested in uncovering whether any patterns were associated with a focus group's proximity to the nearest public facility. We also identified commonalities, variations and disagreements across the FGDs, with illustrative quotes from participants used to foreground their voices.

Ethical considerations

Ethical clearance was obtained from the Uganda National Council for Science and Technology (UNCST-SS-2548) to conduct this study. Verbal informed consent was also obtained from study participants. Confidentiality safeguards were fully explained, and participants were informed about risks to their participation, that participation was voluntary, confidential, and that they could freely withdraw their participation at anytime during the interview or discussion.

Findings

Of the caretakers who participated in the study, approximately 74% had attended some primary school, while 15% had attended some secondary school. Seven percent had no formal education, while as many as 90% were subsistence farmers whose livelihood came through tilling the land or keeping livestock.

Caretakers mentioned numerous barriers that inhibit their ability to seek services for children under five, including a lack of drugs at facilities due to regular stock-outs; long wait times, even for patients in critical condition; a lack of money for transport, especially among patients who lived considerable distances from the nearest facility; inadequate or non-existent roads (which can delay access); unpredictable hours of operation at facilities; health workers who were unprofessional or verbally abusive to patients; general poverty on the part of caretakers; and a lack of knowledge about important health-related issues. While certain illnesses came with their own set of challenges (not having bed nets to protect against malaria, for instance), almost all challenges were mentioned in non-disease-specific contexts.

When asked to list their five greatest barriers to seeking healthcare on behalf of children under five, the study's 36 focus groups came up with a combined total of 177 reported barriers. We ultimately grouped these barriers into four thematic categories: (1) geographical access barriers; (2) facility commodities, staffing, and infrastructural barriers; (3) facility management and administration barriers; and (4) household barriers related to financial circumstances, domestic conflicts with male partners, or a stated lack of knowledge about health-related issues. We also grouped findings based on the distance of focus group participants to the nearest public facility.

Of the total number of barriers mentioned (177), over one-third concerned poor or inadequate facility supplies, staffing, and infrastructure (64), while geographical access barriers comprised slightly more than one-quarter of all barriers (53). By contrast, focus groups mentioned barriers related to facility management and administration only 28 times, or less than half as often as they mentioned those related to supplies, staffing and infrastructure. Focus groups mentioned household barriers 32 times.

Geographical access barriers

Within these thematic categories, our research team wanted to know the types of barriers identified by focus groups at various distances from the nearest public health facility. Perhaps unsurprisingly, focus groups located in villages 5 km or further from the nearest public health facility mentioned more geographical barriers

than those who lived nearer. Of the total number of geographical-access barriers mentioned by all focus groups in the study, 40 out of 53 came from focus groups located 5 km or more from the nearest facility. The kinds of barriers mentioned by different focus groups were similar in nature. Participants talked about physical distances to facilities, a lack of affordable transport, poor roads that were sometimes impassable during rainy seasons, and the nature of the geographical terrain (which was especially problematic for groups located in hilly regions or on islands). As one participant in the 8–10 km cohort said:

"If the distance [to the facility] was walk-able, then transport money would not be an issue."

The focus group to which this caretaker belonged ultimately included both 'long distance' and 'lack of transport money' among their top-five barriers to seeking care. Another participant from a village 5–7 km from the nearest health facility noted the ways in which distance sometimes forced caretakers to completely opt out of facility-based care:

"The distance is long. The child may even die on the way, so I go to a traditional herbalist."

In this case, the caretaker was drawn to the herbalist because of the long distance to the health facility, although dualistic healthcare seeking is common in Uganda (Konde-Lule et al. 2006).

Facility commodities, staffing, and infrastructural barriers

Barriers related to inadequate facility commodities, staffing, and infrastructure were the most common challenges mentioned by focus groups. As noted in Table 3, this category typically included complaints about drug stock-outs and staffing shortages, along with some complaints about inadequate space within facilities for health workers to provide necessary services. When we examined the distribution of barriers mentioned according to each focus group's proximity to the nearest public health facility, the three groups were similar. Of the 64 barriers mentioned that were related to commodities, staffing, or infrastructure, 22 were mentioned by focus groups between 3 and 5 km from the nearest health facility; 22 were mentioned by groups between 5 and 7 km; and 20 were mentioned by those between 8 and 10 km. One participant from a community located 3–5 km from the nearest public facility described the nearby hospital's problems with insufficient numbers of health workers as follows:

"The other problem is when we go to the main hospital in Bugiri, you find that the health workers really work but are very few [in number]. You find a health worker who has slept at the health centre, and it is just at 10 am that she gets someone to replace her. The patients are also very many in number, and you find that she has worked all night without resting, so when you find her tired, you also put all your anger on her, saying she hasn't helped. But these health workers care about the patients. If you get there when you find them worn out, you think that they don't care. At the reception desk on Mondays, you might find only one clinic officer [on duty] who must attend to many patients. He writes without end. Even the examiner he refers you to is not enough because there are so many patients. You explain to him five diseases and he will only write three diseases. So you find that the health workers are few and the patients are very many, which is why if they have put aside drugs for a week, they run out fast. If you want proof that the number of patients are really many, try going to Bugiri Hospital on Monday or Tuesday. You won't want to go back there."

Table 1. Number of focus groups, by distance to nearest facility

| | 3–5 km from nearest facility | 5–7 km from nearest facility | 8–10 km from nearest facility | Total number of focus groups |
|--|---------------------------------|---------------------------------|----------------------------------|------------------------------|
| Focus groups per district | 1 | 1 | 1 | 3 |
| Focus groups within study (12 districts) | 12 | 12 | 12 | 36 |

Table 2. Demographics of participants

| Demographics | Focus group cohort: 3–5 km from nearest facility | Focus group cohort: 5–7 km from nearest facility | Focus group cohort: 8–10 km from nearest facility | Total |
|--------------------------|---|---|--|-------|
| Age | 120 | 119 | 118 | 357 |
| 15-24 | 32 | 29 | 18 | 79 |
| 25-34 | 55 | 55 | 69 | 179 |
| 35-44 | 25 | 25 | 20 | 70 |
| 45+ | 7 | 8 | 11 | 26 |
| Age not given | 1 | 2 | 0 | 3 |
| Average number of living | 4 | 4.5 | 4.3 | _ |
| children per woman | | | | |
| Education | 120 | 119 | 118 | 357 |
| None | 7 | 7 | 10 | 24 |
| Primary | 87 | 89 | 89 | 265 |
| Secondary | 21 | 17 | 18 | 56 |
| Tertiary | 0 | 0 | 0 | 0 |
| Education not given | 5 | 6 | 1 | 12 |
| Occupation | 120 | 119 | 118 | 357 |
| Farming | 109 | 111 | 103 | 323 |
| Housewife | 6 | 3 | 4 | 13 |
| Commerce/Trade | 3 | 2 | 10 | 15 |
| Other | 2 | 3 | 1 | 6 |

Table 3. Themes that emerged among caretakers

| Category | Barriers mentioned by caretakers |
|--|---|
| Geographical access | Barriers mentioned: Transport costs to facility; poor road infrastructure; inaccessible/difficult terrain |
| | Example: "Health facilities are far away from this village, which makes it difficult to seek health services. As a result, we buy medicine from the nearby drug shops." (8–10 km cohort) |
| Facility commodities, staffing, and infrastructure | Barriers mentioned: Drug stock-outs; health worker understaffing; inadequate training among health workers; poor or insufficient facility infrastructure |
| | Example: "The government facilities have no tablets to give our children. When we go there, they write for you the prescription and tell you to go and buy it from the drug shop, yet you have no money. But the time we take our children to the public facility, it means we have no |
| Facility management and administration | money to buy drugs." (3–5 km cohort) Barriers mentioned: Poor conduct and professionalism among health workers; frequent tardiness and absenteeism among health workers; the solicitation of illegal fees by health workers; poor triaging/queue management within facilities |
| | Example: "Harsh treatment by health workers prevents some of us from seeking treatment. Those nurses are so rude to us. Sometimes, instead of telling us in a humble way to go and buy drugs from the drug shop, they just toss aside your [medical records] book." (5–7 km cohort) |
| Household barriers | Barriers mentioned: 'Poverty' and other financial barriers, which impact not only direct consumer costs (like the affordability of drugs at private clinics), but indirect consumer costs (like the time spent away from work when seeking care at a facility); conflicts between spouses or a lack of support from male partners; lack of knowledge about health-related issues; caretaker preferences for particular services and providers (for instance, a personal preference for a particular provider, clinic, or drug to treat a given ailment) Example: "My husband simply says, 'take the child to the health facility.' He is difficult. He sends |
| | you to the health facility, but he does not care. He sends you to the health facility but does not facilitate you with any money." (8–10 km cohort) |

The final refrain is worth noting. Insufficiently staffed (or stocked) facilities appear to cause some caretakers to at least consider opting out of future care-seeking at certain locations. It is worth noting, too, that despite the fact that focus groups at different distances from the nearest public health facility mentioned these kinds of barriers at similar frequencies, caretakers in different locales may make vastly different choices in *response* to these barriers. For example, someone who lives relatively close to a health facility may complain about stock-outs but will nevertheless be able to travel to the facility to verify those perceptions at a cost that is probably less than what someone who lives further away will have to pay. As a respondent in the 3–5 km cohort said:

"For me, I always start with Apoi Health Centre, but sometimes when you go there you find that there are no machines to test our child. Then I end up going to the clinic. Most times when my child gets sick, I don't have enough money, but they always treat the child on credit and I pay later."

By contrast, caretakers who live further away may opt out altogether from seeking care at the facility rather than spend the time and money needed to travel to a facility that may not have the resources available to treat them. As one caretaker who lived 5–7 km from her nearest public facility said:

"Sometimes there are no drugs at the public facility. That's why I do not waste my time. I go straight to the bush and collect herbs, cook them, and give them to the sick child."

Among some caretakers, the perceived lack of supplies at certain facilities appears to contribute to self-diagnosis or the use of herbal treatments.

Facility management and administration barriers

Perhaps one of the more interesting findings came from the distribution of barriers related to facility management and administration. As noted in Table 3, this category typically included barriers related to health worker professionalism, timeliness (specifically, complaints about tardiness and absenteeism), the solicitation of illegal fees, and poor triaging and queue management, especially concerning children believed to be very sick. When grouped by focus group proximity to the nearest public facility, we found that groups closest to the facility mentioned managerial or administrative barriers twice as often as those who lived further away. Of the 28 barriers mentioned that were related to facility management and administration, 16 were mentioned by focus groups between 3 and 5 km from the nearest health facility, while 7 were mentioned by groups between 5 and 7 km, and 5 were mentioned by those between 8 and 10 km.

Complaints about health worker misconduct were mentioned by focus groups in all three cohorts as a barrier to care-seeking. Participants in one focus group located 3–5 km from the nearest public facility described instances of verbal abuse and threats on the part of some health workers not to treat seriously ill children:

R1: You can take a child who is in a critical condition and they try to show you that they don't care. When they are busy in conversation, they do not want anybody to tell them that my child is dying.

R7: They asked me: 'Do you think that we have never seen children dying? Let it die—the mortuary is open.'

R9: The same thing happened to me.

R3: They asked me: 'Do you think that when your child dies I will not get my salary? Or will my salary be reduced because your child has died?'

Caretakers who have been on the receiving end of abusive treatment by health workers may understandably delay or completely avoid seeking care at the facility where they experienced the maltreatment. Concerning the solicitation of illegal fees, or bribes, by health workers, another focus group in the 3–5 km cohort had this to say:

Moderator: If health workers request money, how much would it be?

R9: Like 10,000 shillings [approximately US\$3.00].

R7: Even 5,000 shillings would work for you.

Moderator: What if I go with a coin of 500 shillings—what happens?

All: [Laughing] No, no . . . they will not attend to you.

This last quote highlights the embedded costs within care-seeking at purportedly 'free' health facilities. For those caretakers who have to factor in transport expenses on top of the payment of illegal fees, the costs of receiving care at public facilities may end up prohibitively expensive.

Household barriers

Focus groups in all types of communities tended to mention household barriers such as financial circumstances, domestic conflicts, or a stated lack of knowledge about health-related issues less frequently than they mentioned barriers related to geographical access or facility commodities, staffing, and infrastructure. However, financial barriers – which were the most commonly mentioned barrier within this last category – arguably undergirded many of the other challenges articulated by focus groups throughout the study, from challenges related to affordable transport to challenges related to drug stock-outs and the solicitation of illegal fees among health workers. When financial barriers were not explicitly mentioned in conjunction with another barrier (such as transport), we grouped them under the theme of household barriers. The most common financial barriers mentioned were 'poverty' and 'lack of money'.

Household barriers were most commonly mentioned among focus groups in the 8–10 km cohort. In addition to financial barriers, focus groups mentioned problems with husbands and male partners (such as a lack of support in caring for sick children, misunderstandings between spouses, inebriation, and domestic violence). A few focus groups also complained about a lack of knowledge of health-related issues (which can inhibit proper care-seeking and prevention). On the subject of poverty and money, one participant described the partial treatments that some caretakers pursue when they do not have doctor-prescribed medication to give to sick children:

"For us in the village, we are our own doctors. We treat ourselves and we are the ones that tell the drug shop attendants what to do. If I have my 200 shillings, I'll tell her [drug shop attendant] to give me medicine for 200 shillings, or 500 shillings, or 1,000 shillings, but she can give you a clue as to how much the dose costs. Say full treatment costs 15,000 shillings and you tell her that you have only 500 shillings. As a business person, she will sell them to you and there are those who are lucky and get cured by such doses."

While administering partial doses is a choice for some caretakers, other focus groups discussed turning towards herbal medicine, sometimes when husbands or male partners were unable to provide money for treatment.

With some husbands, when asked for money for medication, their response is, 'we don't have money.' So this forces us to go and borrow money from our relatives or friends, or use herbs.

Discussion

A degree of overlap exists within each of the four thematic categories used within this study. Problems related to geographical access, for instance, were often a function of both economic circumstances (Peters et al. 2008; Levesque et al. 2013) and the number and placement of health facilities in a given area. This has been found in other studies as well (Ensor and Cooper 2004). Similarly, geographical access appears to have an impact on the ways in which barriers related to facility commodities, staffing, and infrastructure are experienced (Penchansky and Thomas 1981), with those caretakers who reside nearest to a facility able to at least investigate whether the facility has the staffing or drugs needed to adequately treat an ailing child. Likewise, the challenge of household barriers (frequently financial among respondents) may render some caretakers more vulnerable to neglect or unprofessional conduct among poorly managed health workers. Illustrations of inefficiency and the corruption of duty-bearers at health facilities abound in our study findings and elsewhere (Ensor 2004 and Lewis 2006). And, as illustrated by at least one respondent, a lack of money affects the ability of some caretakers to purchase complete doses to treat ailing children, which in turn could contribute to drug resistance in certain areas (Global Antibiotic Resistance Partnership - Tanzania Working Group 2015). Yet, despite these various interlinkages, we nevertheless find the four themes conceptually useful as a way to better understand the relative significance that caretakers placed on different kinds of barriers to care, particularly when findings were grouped by focus group distance to facility.

While some of the findings that emerged from this study were anticipated (e.g., that barriers related to geographical access would be mentioned more often by caretakers who lived further away from health facilities), other findings revealed some unexpected patterns. Of particular note was the pattern of responses related to facility management and administration. The fact that such challenges were mentioned twice as often by those who lived closest to health facilities suggests that such barriers may be relatively more significant to caretakers who have less costly, and thus less prohibitive, distance-related expenditures. Whether (and under what conditions) poor facility management and administration becomes an actual *deterrent* to seeking care – regardless of a caretaker's relative distance to the nearest facility – is a topic for further research.

From an efficiency point of view, strengthening facility management and administration is of vital importance. Improving the performance of front-line health workers - from absenteeism and tardiness, to poor customer care, to inadequate triaging - is akin to picking low-hanging fruit in terms of health systems expenditure, at least relative to the more costly imperatives of increasing drug stocks or building (and staffing) more health facilities throughout the countryside. The effects of poor facility management can sometimes be identified by patients who seek care at poorly run facilities, which may be why such barriers are prime targets for social accountability initiatives that seek to apply upward pressure on government systems to improve service delivery - the so-called 'short-route' to accountability described in the World Bank's 2004 World Development Report. Superficially, at least, improving facility management and administration may not require the kind of investment needed to alleviate more costly material barriers to care, although the root causes of such problems can make certain problems more intractable than they first appear. If health worker salaries are delayed for months on end, for instance - which has been a problem in Uganda over the years (Kyaddondo and Whyte 2003; Lubulwa and Aliga 2014)-health unit administrators may have difficulty reprimanding health workers for tardiness and absenteeism.

Indeed, while initiatives that focus on improving the performance of front-line civil servants have yielded mixed results in different sectors and locales (Gaventa and Barrett, 2012; Devarajan et al. 2013; Gaventa and Mcgee 2013; Mansuri and Rao 2013; Fox 2015), in Uganda, at least, one particular study has suggested that gamechanging improvements to health sector service delivery can, in fact, be wrought through reductions in barriers related to facility management and administration. An earlier study by Bjorkman and Svensson (2009) documented improvements in health outcomes (from greater utilization of outpatient services to reductions in under-five mortality) through a community-based monitoring approach that sought to strengthen health worker performance and customer care. The intervention involved individuals within a 5 km catchment area of health centre IIIs and used monitoring devices such as suggestion boxes, numbered waiting cards, posters informing patients about free services, and revitalized voluntary oversight committees.

It is difficult to tell whether (and to what extent) the improvements in health outcomes that Bjorkman and Svensson reported were a result of better service delivery or increased service utilization (Devarajan et al. 2013). One of the study's assumptions appears to be that the monitoring devices available within facilities were used to full effect by facility administrators, and that health workers were somehow shamed into improving customer care in the aftermath of the intervention (Bjorkman-Nyqvist et al. 2014). Yet, regardless of the ultimate mechanisms that contributed to the reported results of the study, the catchment area from which the project was drawn (within 5 km of the nearest health centre III) suggests that those caretakers who were targeted were ones for whom geographical access was less problematic. This raises an obvious but important point about issues of equity in these kinds of initiatives - issues that are reinforced by the findings from our own study. While strengthening facility management and administration is both critical and necessary to improving service delivery in countries like Uganda, it should be done while recognizing that alleviating such barriers may not, in themselves, address what many caretakers describe as their greatest challenges to care-seeking, especially those caretakers who are geographically harder to reach - and by extension, whose children often face an increased risk of mortality (Victora et al. 2000). In light of calls for greater equity in childsurvival programming (Mulholland et al. 2008), remembering this point is vital for policymakers and donors alike.

Limitations

Within our study, caretakers appeared more inclined to focus on supply-side barriers than demand-side barriers. This may be an accurate reflection of the barriers they face or it may be due to an inclination to focus on external challenges rather than those at the household or individual level (assuming that people are always able and willing to identify such challenges). It may also be due to the way in which our initial question was asked, which prompted respondents to focus on barriers to seeking services on behalf of children in need of treatment. Had we asked about the broader challenges that caretakers face in maintaining good health, some of our answers would have likely been different (Rifkin 2009).

Additionally, the use of focus groups to gather this kind of data poses some challenges. Focus groups can be useful insofar as they allow respondents to discuss and debate the nuances of various issues, some of which might not have occurred to individuals if they were interviewed or surveyed alone. But group settings also create the opportunity for some voices to dominate others, despite the best

efforts of experienced moderators. It may have been the case that the top barriers to care that each group developed do not reflect the individual challenges of all participants. Similarly, while we had planned to have all focus groups rank their top five greatest barriers to seeking services, several of our groups gave us their top five barriers without ranking them from one to five. Because of this, we treated each of the barriers given as equally significant, although that may not have been the case for all groups.

Additionally, while the qualitative method used allowed us to identify patterns in data, we cannot make population-wide inferences based on these findings. At the very least, the research suggests a direction for further inquiry.

Conclusions

The decision to seek care at health facilities is a complex process of negotiating any number of supply- and demand-side barriers. Understanding how people identify and weigh their own challenges is important not only as a way to better understand which barriers have potentially formidable implications from the perspective of users, but also as a way for national planners and donors to set priorities. While some types of barriers may be more cost-effective to address, other considerations must come into play, as well - especially when considering ways to prioritize interventions so that reductions in overall mortality minimize the possibility of exacerbating inequity, leaving those children who are hardest to reach even further behind (Victora et al. 2000). Tangentially, our findings also suggest avenues for future research that examines the challenges and potential outcomes of social accountability initiatives that target caretakers for whom geographical access is an outsized challenge.

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References

- Awor P, Wamani H, Bwire G et al. 2012. Private sector drug shops in integrated community case management of malaria, pneumonia, and diarrhoea in children in Uganda. The American Journal of Tropical Medicine and Hygiene 87: 92–6.
- Bjorkman-Nyqvist M, De Walque D, Svensson J. 2014. Information is power: experimental evidence on the long-run impact of community based monitoring. Policy Research working paper; no. WPS 7015; Impact Evaluation series. Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/739811468318587268/Information-is-power-experimental-evidence-on-the-long-run-impact-of-community-based-monitoring.
- Bjorkman M, Svensson J. 2009. Power to the people: evidence from a randomized experiment on community-based monitoring in Uganda. *Quarterly Journal of Economics*, **124**(2): 735–69.

- Carthaigh NN, De Gryse B, Esmati AS *et al.* 2015. Patients struggle to access effective health care due to ongoing violence, distance, costs and health service performance in Afghanistan. *International Health* 7: 169–75.
- Cavanagh S. 1997. Content analysis: concepts, methods and applications. Nurse Researcher 4: 5–16.
- Creel LC, Sass JV, Yinger NV. 2002. Client-centered quality: clients' perspectives and barriers to receiving care. New Perspectives on Quality of Care 2: 1–8.
- Devarajan S, Khemani S, Walton M. 2013. Can civil society overcome government failure in Africa? *The World Bank Research Observer* lkt008.
- Devarajan S., Khemani S. & Walton M. 2014. Can Civil Society Overcome Government Failure in Africa. World Bank Res Obs 29(1), 20–47.
- Downe-Wamboldt B. 1992. Content analysis: method, applications, and issues. *Health Care Women International* 13: 313–21.
- Ensor T. 2004. Informal payments for health care in transition economies. Social Science & Medicine 58: 237–46.
- Ensor T, Cooper S. 2004. Overcoming barriers to health service access: influencing the demand side. *Health Policy Plan* 19: 69–79.
- Fox JA. 2015. Social accountability: what does the evidence really say? World Development 72: 346–61.
- Gaventa J, Barrett G. 2012. Mapping the outcomes of citizen engagement. World Development 40: 2399–410.
- Gaventa J, Mcgee R. 2013. The impact of transparency and accountability initiatives. *Development Policy Review* 31: s3–s28.
- Global Antibiotic Resistance Partnership-Tanzania Working Group 2015. Situation analysis and recommendations. Antibiotic use and resistance in Tanzania. Washington, DC and New Delhi: Centre for Disease Dynamics, Economics & Policy.
- Golooba-Mutebi F. 2005. When popular participation won't improve service provision: primary health care in Uganda. Development Policy Review 23: 165–82.
- Government of Uganda 2010. National Development Plan (2010/11 2014/15). Kampala, Uganda: Government of Uganda
- Hsieh HF, Shannon SE. 2005. Three approaches to qualitative content analysis. *Qualitative Health Research* 15: 1277–288.
- Katahoire AR, Henriksson DK, Ssegujja E *et al.* 2015. Improving child survival through a district management strengthening and community empowerment intervention: early implementation experiences from Uganda. *BMC Public Health* 15: 797.
- Kiwanuka SN, Ekirapa EK, Peterson S et al. 2008. Access to and utilisation of health services for the poor in Uganda: a systematic review of available evidence. Transactions of the Royal Society Tropical Medicine Hygiene 102: 1067–074.
- Konde-Lule J, Okuonzi S, Matsiko C et al. 2006. The Potential of the Private sector to Improve Health Outcomes in Uganda Kampala. Uganda: Makerere University Institute of Public Health.
- Kyaddondo D, Whyte SR. 2003. Working in a decentralized system: a threat to health workers' respect and survival in Uganda. *The International Journal of Health Planning and Management* 18: 329–42.
- Levesque JF, Harris MF, Russell G. 2013. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. *International Journal for Equity in Health* 12: 18–18.
- Lewis Maureen January 2006. Governance and corruption in public health care systems. *Center for Global Development working paper* Number 78. https://www.cgdev.org/sites/default/files/5967_file_WP_78.pdf
- Lubulwa H, Aliga I. 2014. Health workers, civil servants strike over delayed salaries. *Daily Monitorof Thursday 11 March*. http://www.monitor.co.ug/News/National/Health-workers-civil-servants-strike-over-delayed-salaries/688334-2238576-g3l10n/index.html.
- Mansuri G, Rao V. 2013. Localizing Development: does Participation Work? World Bank Policy Research Report, Washington DC.
- Mbonye AK. 2003. Prevalence of childhood illnesses and care-seeking practices in rural Uganda. *The Scientific World Journal* 3: 721–30.
- Mbonye AK, Neema S, Magnussen P. 2006. Preventing malaria in pregnancy: a study of perceptions and policy implications in Mukono district, Uganda. *Health Policy Plan* 21: 17–26.
- Ministry of Finance Planning and Economic Development 2013. Health Workers' Shortage in Uganda: Where Should the Government Focus its

- Efforts? Kampala, Uganda: Ministry of Finance Planning and Economic Development.
- Ministry of Health Uganda 2010. The Second National Health Policy. Kampala: Ministry of Health.
- Mulholland E, Smith L, Carneiro I et al. 2008. Equity and child-survival strategies. Bulletin of the World Health Organization 86: 399–407.
- Nakyanzi JK, Kitutu FE, Oria H et al. 2010. Expiry of medicines in supply outlets in Uganda. Bulletin of the World Health Organization 88: 154–58.
- O'Connell TS, Bedford KA, Thiede M, Mcintyre D. 2015. Synthesizing qualitative and quantitative evidence on non-financial access barriers: implications for assessment at the district level. *International Journal for Equity in Health* 14: 1.
- Okwaraji YB, Cousens S, Berhane Y *et al.* 2012. Effect of geographical access to health facilities on child mortality in rural Ethiopia: a community based cross sectional study. *PLoS One* 7: e33564.
- Okwero P., Tandon A., Sparkes S. et al. 2010. Fiscal Space for Health in Uganda: Uganda Public Expenditure Review [Online]. World Bank Working paper No. 186. The World Bank in Collaboration with the Ministry of Finance, Planning, and Economic Development and the Ministry of Health. Available: http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/Peer-Reviewed-Publications/WP186FiscalSpaceforHealthinUgandapdf.pdf accessed 26 January 2016.
- Penchansky R, Thomas JW. 1981. The concept of access: definition and relationship to consumer satisfaction. Medical Care 19: 127–40.
- Peters DH, Garg A, Bloom G et al. 2008. Poverty and access to health care in developing countries. The Annals of the New York Academy of Sciences 1136: 161–71.

- Rifkin SB. 2009. Lessons from community participation in health programmes: a review of the post Alma-Ata experience. *International Health* 1: 31–6.
- Uganda Bureau of Statistics (UBOS) & ICF International Inc. 2012. *Uganda Demographic and Health Survey* 2011. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc. Available: https://dhsprogram.com/pubs/pdf/FR264/FR264.pdf accessed 27 August 2015.
- Uganda Bureau of Statistics (UBOS) and ICF 2017. *Uganda Demographic and Health Survey 2016: Key Indicators Report.* Kampala, Uganda: UBOS, and Rockville, Maryland, USA: UBOS and ICF. Available: http://dhsprogram.com/pubs/pdf/PR80/PR80.pdf cfm accessed 20 April 2017.
- Vaismoradi M, Turunen H, Bondas T. 2013. Content analysis and thematic analysis: implications for conducting a qualitative descriptive study. Nursing & Health Sciences 15: 398–405.
- Victora CG, Wagstaff A, Schellenberg JA et al. 2003. Applying an equity lens to child health and mortality: more of the same is not enough. Lancet 362: 233–41.
- Victora CG, Vaughan JP, Barros FC et al. 2000. Explaining trends in inequities: evidence from Brazilian child health studies. Lancet 356: 1093–098.
- Waiswa P, O'Connell T, Bagenda D et al. 2016. Community and District Empowerment for Scale-up (CODES): a complex district-level management intervention to improve child survival in Uganda: study protocol for a randomized controlled trial. Trials 17: 8.
- World Health Organisation 1978. 2010. Primary Health Care: Report of the International Conference on Primary Health Care. Alma-Ata, USSR. September 6-12, Geneva: WHO. http://apps.who.int/iris/bitstream/10665/ 39228/1/9241800011.pdf accessed 13 September 2016.