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Truth, humane treatment, and identity: perspectives on the legitimacy of the public and private health sectors during Covid in Zambia

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Legitimacy is necessary for resilience and trust helps to legitimize health systems. Providing services during Covid has relied on both the private and public sectors but there is little information on differences in trust between these sectors during shocks like Covid and how it may impact the health system's legitimacy. The purpose of this study was to explore community trust in the public and private sectors of the Zambian health system during Covid, to generate understanding on how trust in the different sectors may influence the system's legitimacy. Twelve focus groups discussions and 22 key informant interviews were conducted in 2022 with community members who used public, private, and faith-based services during Covid and service providers, and thematic analysis identified perceptions of trust between the different sectors. The themes 'Humane, patient-centred treatment' and 'Communicating the truth' describe the desire for humane interactions and truthfulness during Covid, compromised by fear, uncertainty, and suspicions of the motives of the sectors, and alleviated by support, security, and shared identity. The legitimacy of the public sector was influenced by shared spaces, values, and identities with communities. The private sector maintained its legitimacy through service quality and its identity as a non-governmental business. Interpersonal trust was important, but identity played a larger role than high-quality interactions for legitimacy in Zambia during the pandemic. To enhance legitimacy and resilience during shocks, potential strategies include strengthening the quality of public sector interactions to meet private sector standards, emphasizing the public sector as a public good, and clarifying the public sector's role vis-à-vis the government during crises.

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Introduction

The private health services sector—the non-state organizations and actors who provide health services with or without the aim of making a profit, including faith-based health providers (Clarke et al. 2019; Olivier et al. 2015)—has been critical in providing both Covid-related care and routine health services during the pandemic. Globally, it has filled gaps in public provision of Covid testing, inpatient care, telehealth services, and routine care (Gupta 2020; Williams 2020). This is occurring after chronic underinvestment in the state-funded, government-run public sectors of health systems in many countries, leading to the growth of private sectors in low- and middle-income countries (LMICs) like Zambia (De Ceukelaire and Bodini 2020).

Private sectors can compete with the public sector for services and resources and are often perceived by the population to provide faster, higher quality, more efficient, more satisfactory, and more trustworthy care (Kruk et al. 2018; Olivier et al. 2015; Saulnier et al. 2022). If the public sector has a limited capacity to provide care for all needs during shocks like Covid, the private sector may be the only available care choice. For low-income, resource constrained settings, the economic cost to users and to the public sector can be great, if the private sector is the only choice (Dasgupta et al. 2020; Gupta 2020). The growth of the private sector and the public and private sector's performance during shocks can impact trust in the health system and consequently on the system's resilience (Gupta 2020; Williams 2020).

Legitimacy is necessary for resilience because it supports the governance of resilience (Topp 2020; Blanchet et al. 2017). Legitimate health systems are perceived as "desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman 1995). As social systems, health systems are subject to issues of power and rationality (Matin et al. 2018; Topp 2020). Managing resilience—defined here as the capacity to absorb, adapt, or transform while maintaining essential services and functions when experiencing a shock like the Covid pandemic (Barasa et al. 2017; Blanchet et al. 2017)—depends on the formal and informal rules that affect the relationships, power, actions and interactions of people and groups in the health system (i.e., governance) (Blanchet et al. 2017). Trust is one lens for exploring legitimacy via the relationship between health system functioning and human interactions (Topp and Chipukuma 2016). Groups with limited power to express or decide what health system attributes and interactions are important to them may be unable to manage their health needs, which in turn may weaken the health system's capacity for resilience (Saulnier et al. 2020; Weichselgartner and Kelman 2015). Populations may also make decisions or behave in ways that undermine the choices and objectives that the system put in place to respond to a shock (Gille et al. 2022). For instance, the effectiveness of digital tools to help control Covid partly depended on populations believing that their privacy would be secured (Saulnier 2022; Lund-Tønnesen and Christensen 2023a). Health systems with low legitimacy may need to further adapt their response to maintain any legitimacy with the population, increasing the stress on the health system.

Trust helps to legitimize health systems. Trust in the health system can be understood as a willing acceptance of vulnerability under the assumption that one's interests will be cared for (Hall et al. 2001; Schoorman et al. 2007). Creating trust is a complex and continuous process. People develop interpersonal trust through their individual interactions with health system actors, as well as institutional trust through their perceptions of the organizational and management context that encompasses these interactions, the fairness and good intent of the system, and their understanding of the value that the health system adds to society (e.g. creating an enabling environment for them to make health-related decisions) (Gilson 2003, 2005). Earlier work has argued for the need to explore trust at the micro, meso, and macro levels of the health system (Gilson 2003; Straten et al. 2002), to capture a person's perception of personal interactions with providers at the individual (micro) level, the organizational and managerial context where their interaction takes place and the relationships between actors within that context (meso level), and trust in the system as an institution that shares their values and will act in their best interest (macro level) (Straten et al. 2002).

Trust in the health system cannot be easily separated from trust in other institutions, like the government, which is simultaneously a health authority, service provider, and regulator for the public and private sectors. For instance, failure to adequately regulate the private sector has been shown to erode trust in the government in LMICs (Fanelli et al. 2020). Research has shown nested trust between other governmental, social institutions (like education) and the health system in Kenya (Sripad et al. 2018), and has linked government linked changes in governmental trust to changes in health system trust in the United States and in the Democratic Republic of Congo (Blendon and Benson 2022; Vinck et al. 2019). Despite the potential for institutional trust to influence health behaviors and outcomes, research on public trust in health systems as institutions is still scarce, especially in LMICs (Gille et al. 2015; Gille et al. 2021; Govender et al. 2022; Topp and Chipukuma 2016). Furthermore, because public, institutional trust legitimizes health systems, it also influences people's willingness to engage and interact with the system (Gille et al. 2021), such as getting vaccinated (Vinck et al. 2019). However, there is little existing evidence on changes in legitimacy during shocks (Vinck et al. 2019; Gilson et al. 2020; Saulnier 2021), but during Covid, the legitimacy of the state appeared to influence the legitimacy of the health system (Saulnier 2022). The idea of 'codependent' legitimacy between the public and private sectors may also apply, although this has not been explored (Saulnier 2021). For instance, if trust in the public sector falls during a shock and the sector is no longer seen as legitimate, will the legitimacy of the private sector also change?

Trust can differ between the public and private sectors of the health system, which can be closely tied to their institutional identity (i.e. governmental, commercial, religious) (Østergaard 2015; Gille et al. 2015). For instance, the idea of 'customer care' from private providers has been given as a reason for trust in sub-Saharan Africa (Østergaard 2015). This matters for legitimacy in settings where choice between public and private providers exists, as both a reflection of trust in either sector and as an indication of which values, norms, and beliefs are considered desirable, proper, or appropriate, in the context of legitimacy. Because trust needs to be constantly built (Bloom et al. 2008; Gilson 2003), and because the experience of both shocks and healthcare are inherently uncertain (Blanchet et al. 2017; Ozawa and Sripad 2013; Straten et al. 2002), there is no guarantee that populations will trust the public and private health sectors in the same way during a shock like Covid. For instance, trust may change if the two sectors perform differently, if one performs worse, or if one is unable to maintain services during a shock, which can change how people utilize services. If shocks affect people's trust in each sector, then each sector may need different approaches to build legitimacy to prepare, respond, and recover from shocks.

This qualitative study aims to explore community trust in the public and private sectors of the Zambian health system during Covid, in order to generate understanding on how trust in the different sectors may influence the system's legitimacy. Because perceptions of trust may differ depending on whether users sought shock-related Covid services or routinely provided services, the study explores trust through Covid testing and curative

care for common child illnesses. As the primary point of interaction between people and the health system, facility-based health services are a useful focal point for understanding perceptions of trust in the system: they encompass the interpersonal interactions between people and providers and people's perceptions of organization, management, intent, and value play out at the operational level.

Methods

Study setting. The study is set in Zambia, a lower middle-income country of about 19.5 million people in Sub Saharan Africa. Over 95% of the population identifies as a Christian denomination (Zambia National Public Health Institute 2022). More than half the population (55% in urban areas, 60% in rural areas) lives below the poverty line on less than 2 USD per day (Zambia National Public Health Institute 2022). Sixty percent of people live in rural areas (Zambia Statistics Agency 2022).

The private sector in this study consists of for-profit (*private*) and faith-based (*mission*) facilities. Mission facilities function independently as non-profit entities but receive government funds and resources to operate. Community-based volunteers (CBVs) are a common feature of the Zambian health system and link public and mission facilities to local communities through activities like health education sessions and community sensitization.

Private and mission facilities accounted for about 9% of all health facility visits (Ministry of Health 2016). In rural areas, choice is largely limited to government or mission facilities, while private, for-profit facilities are more common in urban areas. Although primary healthcare user fees were phased out in public facilities by 2012 (Ministry of Health 2006; Ministry of Health 2011), approximately 10% of households still experience catastrophic health expenditure when seeking care, partly due to the low quality and quantity of free public care that leads to users seeking private care (Masiye et al. 2016).

Between March 2020 and May 2023, Zambia recorded over 333,000 Covid cases and 4000 deaths with two large waves in 2021 and early 2022 (ZNPHI, 2022). Health services remained functional, but the pandemic reduced access to routine and chronic services and created public sector challenges with staff shortages, insufficient equipment, and unstable financing (Khan et al. 2021; Ogunleye et al. 2020). During 2020, only public and mission facilities provided Covid-related services. Private facilities began providing Covid services in early 2021. Covid vaccination began in all facilities in April 2021.

The government implemented Covid guidelines at health facilities, including mandatory mask-wearing and Covid testing. Due to test kit shortages, the policy changed in January 2022 to only testing symptomatic individuals attending healthcare facilities (Mudenda et al. 2022; Tembo et al. 2022). Voluntary point-of-care testing for Covid was available for free at public and mission hospitals and at a cost at some private facilities.

Treatment for common childhood illnesses is widely available at public, mission, and private facilities. In 2018, private and mission facilities were a source of advice or treatment for 3% of children who had respiratory symptoms, diarrhoea, or fever (Zambia National Public Health Institute 2022).

Study design, participant selection and recruitment. Focus group discussions (FGDs) and key informant interviews were conducted with participants who had sought a Covid test or curative child health services at a public, private, or mission facility during Covid.

One urban district and one rural district in two provinces with high numbers of reported positive Covid cases were selected purposively to maximize the number of potential participants who sought Covid testing. Both districts are served primarily by public facilities. The rural district included two mission and eight private facilities, situated near the district capital. The urban district had twelve mission facilities and over 200 private facilities.

Table 1 Data collected by sector, district, and service in the catchment areas used for sampling.

Sector	District	Service	Facilities	Data collected
Public	Urban	Covid testing	1 hospital	4 FGDs
		Child health	1 hospital	8 interviews
	Rural	Covid testing	1 hospital	
		Child health	1 hospital	
Private	Urban	Covid testing	1 hospital	4 FGDs
		Child health	1 hospital	3 interviews
	Rural	Covid testing	1 hospital	
		Child health	1 health centre	
Mission	Urban	Covid testing	1 hospital	4 FGDs
		Child health	1 health centre	8 interviews
	Rural	Covid testing	1 hospital	
		Child health	1 health centre	
		Urban and rural district health offices		3 interviews

Participants were enrolled from the catchment areas of public, private, and mission facilities (Table 1). Licensed health centres and hospitals that had been operational since August 2019 and provided Covid or child health services were identified with input from the provincial and district health departments and were visited to check eligibility and confirm participation.

Participants were purposively sampled to obtain diverse community and health service provision perspectives on trust in Covid testing and child health services during the Covid pandemic. Focus group discussions (FGDs) were conducted, stratified by sector and type of service, to capture shared expressions of trust. Adult men and women from the catchment areas were eligible to participate in FGDs if: i) they utilized outpatient curative care for a child with fever, cough, trouble breathing, or diarrhea during the Covid peaks of January-March 2021, May–July 2021, or December-February 2022, or ii) if they had sought and received a Covid test at the facility, or sought diagnosis for cough or trouble breathing and were tested for Covid during the same periods. FGD participants were identified with assistance from local CBVs or healthcare staff.

Key informants were sampled from the facilities and district health offices and included CBVs, nurses, midwives, clinical managers, and public health staff, if they had been occupying their current role for at least six months since February 2020. They were selected for their understanding of community utilization of health services during Covid and were used to triangulate the findings from the FGDs with a health provision perspective.

Data collection. Two experienced qualitative data collectors (authors CS, TH) conducted and audio recorded 12 FGDs and 22 interviews in English or Nyanja during September-October 2022. FGDs had between 5 and 12 participants (103 in total). Because of the comparisons across type of facility and the broad aim, a minimum of 12 FGDs and 20 interviews were planned, using the concept of information power (Malterud et al. 2016). FGDs and interviews were stopped after appraising the power of the information during data collection, after adding two interviews.

Straten et al. (2002) six dimensions of public trust in the health system (Table 2) were used to develop questions for the interview guides on experiences with care during the pandemic (Supplement 1). The dimensions were chosen because they

Table 2 Dimensions of public trust in the health system (Straten et al. 2002).

Dimension	Level	Content
Provider's focus is on the patient	Micro	Patient's confidence that they are the provider's focus of attention and belief that the provider is taking them seriously and will listen to them
Provider expertise	Micro	Patient's belief in the provider's competence and skill
Quality of care	Micro	Patient's belief that they will receive respectful, accurate and timely care that is contextually and socially appropriate to their needs (adapted from (Kruk et al. 2018))
Communication and information from the provider	Micro	Patient's confidence in the information that is shared by the provider and the provider's ability to communicate the information to them
Quality of cooperation	Meso	Patient's confidence that providers can cooperate and communicate with each other
Limited consequences of policies	Macro	Patient's confidence that the effect of policies on themselves will be limited or without consequence (e.g., cost-cutting measures will not disadvantage them when seeking services)

specify factors influencing trust at the micro, meso, and macro levels of the system, and would generate information across all health system levels that could then be explored for interpersonal and institutional aspects of trust. The dimensions have been used previously in lower middle-income countries (Ezumah et al. 2022).

FGDs and interviews took place in private in communal spaces or facilities, such as outside a CBV's home or in empty rooms at a facility. One interview was conducted by telephone. Verbatim transcription was done by one transcriber and checked for quality and translated into English by the data collectors. Any uncertainties in translation were discussed with the first author.

Data analysis. The transcripts were analysed using a data-driven thematic analysis (Braun and Clarke 2006) in Nvivo, meaning codes, categories, and themes were identified through the data without following Straten et al.'s dimensions of trust. The first author led the analysis, and each stage of analysis was triangulated with co-authors CS, TH, and JZ. Initial observations were made during data collection and while reading transcripts, noting similarities and differences across sectors, service types, urban and rural settings, and FGDs and interviews. After gaining familiarity with the data, ideas about trust and differences in perceptions of trust were coded. A further two rounds of coding were conducted, once after coding transcripts from each sector and again after coding all transcripts. An abductive process was used to check for relevance and new ideas that were specific to a sector or universal to all sectors. The final codes were discussed among the authors to determine validity. Categories and themes were developed that represented patterns of meaning around trust within and across the sectors during Covid. The expressions of trust (e.g., as a belief, as an outcome of an experience) described in the categories and theme were mapped by sector into Fig. 1.

Ethical considerations. Approval to conduct the study and analyse the data were given by the University of Zambia Humanities and Social Sciences Research Ethics Committee (no. HSSREC-2022-Mar-031) and the Swedish Ethical Review Authority (no. 2022-03095-01). The Zambian National Health Research Authority, Ministry of Health, provincial health departments, district health departments, and facilities all granted permission to conduct the study. All participants consented verbally and in writing or by thumbprint prior to taking part. No participants withdrew from the study.

Results

Two themes were identified that suggest that trust in public, private, and mission sectors during Covid was contingent on 'Humane, patient-centred treatment' and on 'Communicating the truth' (Table 3). The first describes how trust in facilities across sectors depended on humane treatment and putting the patient and their needs at the centre of care, which was valued over factors like technical expertise. The fear and uncertainty of Covid created a desire for more humanity, security, and support, which were perceived to exist mostly in the private and mission facilities. The second theme describes how the same fear and uncertainty of Covid created a demand for truth. Belief in the truth value of information was undermined by suspicion of the motives of the public and private sectors but ameliorated by sharing social spaces and an identity with the public and mission sectors. Figure 1 illustrates how the themes and categories relate to the community's beliefs, experiences, behaviour, and outcomes that are described in the results, and iterates the differences in perceptions between sectors.

Theme: Humane, patient-centred treatment

Trying to accept low quality care in the public sector. The results in this category describe foundational beliefs that existed prior to Covid. It describes how community members were cognizant of the disconnect between the care they hoped to receive and the reality of what was possible for them to receive at public facilities.

'Negative beliefs about quality at public facilities'

Community members expressed a strong belief that the quality of care is better at private and mission facilities. Good quality was expressed as humane treatment – respectful, attentive, and caring interactions with providers and a friendly, confidential, and encouraging atmosphere for communication with providers about their health and care. They depicted mission facilities as succeeding in creating quality, but private facilities as going above and beyond:

> "Because in private facilities, they pay a lot of attention. If they see that you have a problem, they will take you as their own child at home." – *Mission sector Covid FGD*

Yet the public sector was often portrayed as lacking nearly all these qualities. While certain individual providers were known to be friendly and welcoming, a negative view of interactions at public facilities was pervasive among all FGDs. Community members reported minimal respect, little privacy, limited time to talk, being yelled at, being disregarded, and receiving patronizing and demeaning remarks and behaviour:

> "If they [at the government hospitals] are using English, they just use that throughout. If you do not understand English, then they will regard you as not being human. If they are busy on their phone, they will say 'you are wasting my time'."- *Mission sector Covid FGD*

Community members felt public and mission facilities were constrained by public sector structures that challenged health services, such as frequent shortages of staff, medications, and equipment. Community members also mistrusted student

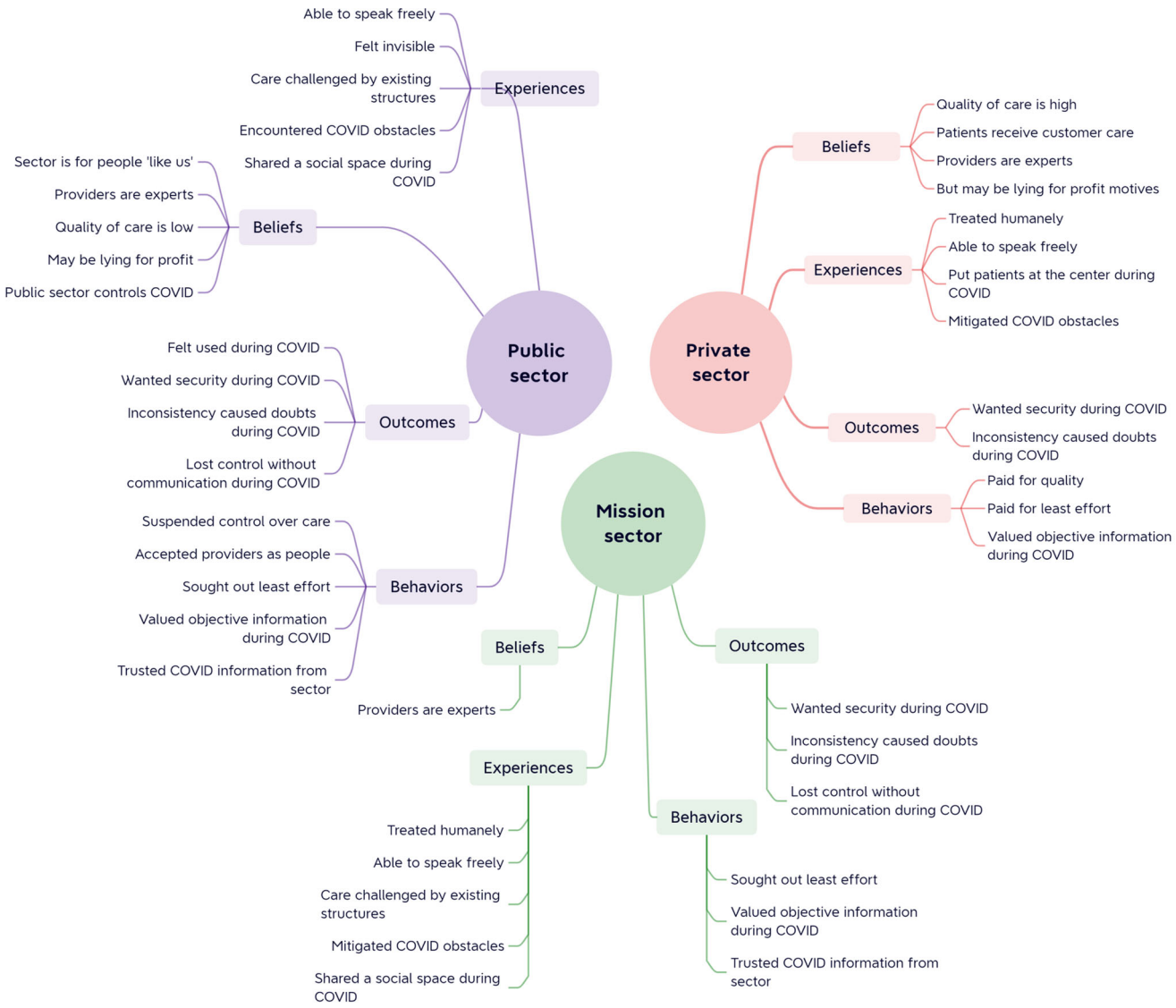

Fig. 1 Beliefs, experiences, behaviors, and outcomes influencing trust. Representation of the results for each sector as the relate to the communities' descriptions of beliefs, experiences, behaviour, and outcomes.

Table 3 Themes, categories, and subcategories describing trust across all sectors.

Theme	Categories	Subcategories
'Humane, patient-centred treatment'	Trying to accept low quality care in the public sector	Negative beliefs about quality at public facilities Reconciling reality with the desire for good quality
	Securing humanity through more patient-centred care during Covid	Paying more to avoid feeling invisible Controlling Covid versus caring for the patient Finding security in supportive care during Covid
	Appreciating simplicity and control	Preferring the least effort to receive care Losing control without communication during Covid
'Communicating the truth'	Valuing tangible truth over lies during Covid	Profit as a motive for lying Who is telling me the truth? Valuing objective truth during Covid
	Gaining Covid legitimacy through a shared identity and spaces	

trainees at public and mission facilities, considering them unreliable and inexperienced providers; private facilities are not obligated to train students.

The poor treatment and structural challenges translated into negative beliefs about the quality of care at public facilities. Community members felt frustrated, resentful, and cheated by the care they received, with serious doubts that they would be helped at all. Some service providers described this as a mismatch of expectations:

> "Tell them that we lose children because of their negligence. We cannot ask questions because they are ever rushing. Otherwise, mission hospitals should continue helping us because they are our only hope. We cannot afford to take

our children to private facilities." – *Mission sector child health FGD*

"But the government will stick to the guidelines. So when [someone with malaria] comes to a government hospital, they will just be given coartem because that is what they have been diagnosed with, so they will say that at the government there is no medicine or they don't treat us nicely, all those things." – *Environmental health specialist, public facility*

'Reconciling reality with the desire for good quality'

Public sector users and rural community members mentioned that affordability and accessibility left them little choice over where to seek care, despite strongly preferring private care or specific mission facilities. With little choice, they described suspending control over their care by 'putting yourself in their hands'. The lack of control was partly alleviated by believing in providers as trained, skilled medical professionals and believing that public facilities would ultimately help them.

"The police say 'don't take the law into your own hands', so we have the same system. Sometimes we do take Panadol when we are not feeling too well, but you find that it is not Panadol that you need to take. Only the doctor should test and tell us whether it is Panadol that we need to take." – *Public sector Covid FGD*

Community members consistently pointed out that they had to accept that providers are people, too, who have demanding jobs. The quality of interactions with providers at public facilities were shaped by the provider's personality (e.g., a naturally negative attitude) and work circumstances (e.g. high demands on their time). Community members acknowledged their own role in the quality of interactions, and often blamed themselves for poor treatment:

"Sometimes it's us, the patients, that show so much disrespect to these health workers. They are human so they also get upset." – *Public sector child health FGD*

Securing humanity through more patient-centred care during Covid. This category denotes how community members valued care that recognized them as human beings in need of help. During Covid, as the public sector took on a new role as controllers of the epidemic, community members felt greater security in humanized care at private facilities, which continued to centre the patient.

'Paying more to avoid feeling invisible'

Before Covid, community members described feeling invisible at public facilities. Long waits to see a provider and being ignored by staff were described as constant. Reasons for waiting were often attributed to provider disinterest, such as using their mobile phones or going to lunch. The lack of attention also bred fear that providers would make treatment errors. Community members felt frustrated, ignored, and dismissed, and questioned whether providers thought of them as human beings seeking help or as a nuisance:

"For them [at the government hospital] to see you, it would take time. They would be busy watching TV, and others listening to the news. They will watch until it is done, while you wait for them to attend to your child. Sometimes the condition of the child is critical and it dies whilst you wait or the condition worsens as you wait. They don't even care about the sick child." – *Mission sector child health FGD*

Alternatively, they saw paying for care at private facilities as a way to earn the right to respectful, attentive care. Because private care was a business transaction, patients, as "customers", could buy good conduct from staff. Private facilities had to uphold high standards of provider behaviour and care to please the customer. In contrast, public facilities were associated with accepting poor treatment, like being shouted at, as the care was free:

"It is easy [to get care] at a private clinic, although you have to pay something. But at the government hospital we do not pay anything, that's why it is difficult. Although the attention at private clinics seems extraordinary, we pay for every bit of it." – *Community-based volunteer interview, public facility*

Because care cost something at all facilities, those who could afford it opted for private care to ensure better quality. Although services at public facilities were nominally free, additional costs (e.g., transport, purchasing prescriptions during stockouts) were ever present and mentally stressful. Paying for private care, where everything was included in the price and the quality was seen as better, was an alternative—although often unaffordable—option.

'Controlling Covid versus caring for the patient'

Community members viewed only public facilities as the government's Covid experts and controllers of the epidemic. Their position as experts was reinforced by strict adherence to Covid guidelines at public facilities. The government and public facilities were both credited with perceived successes in controlling Covid, such as low transmission. Private facilities were mentioned as only useful for Covid treatment:

"One thing that impresses me with the government is that if there is any new disease, they always place themselves on the ground, to look for the source of the disease until they defeat it. So I am impressed with that very much […] At the private, yes, we go there, help is there, but they do not want to research the origin of diseases." – *Private sector Covid FGD*

In their role as Covid experts, public facilities were perceived as accountable to the government. Mission facilities were seen as semi-experts on Covid but more accountable to God or the church. In contrast, private facilities were described as accountable to patients as customers during Covid. This translated into putting the patient at the centre of care rather than putting Covid first:

"You can find the condition of the child is critical but they are rushing to test the mother for Covid. Like seriously, a child is ill and all they're concerned about is my Covid test result? That is why we prefer private hospitals, because they attend to us there and then." – *Private sector child health FGD*

'Finding security in supportive care during Covid'

Covid guidelines generated negative feelings among community members and created new obstacles to care. People disliked and feared the guidelines, particularly mandatory Covid testing. They described feeling that Covid was the only priority at all facilities, often at their expense. These obstacles and fears cost people time, effort, and healthcare (e.g., delaying care) at all facilities:

"It was difficult because sometimes you find that you forget your face mask at home and home is far. At the same time, you don't even have money to buy a new one. So it was very difficult for us because you can't go back home and the child's illness is bad." – *Public sector child health FGD*

However, community members also feared contracting Covid, especially during visits to facilities, and expressed a desire for more security and support. Private and mission facilities were

described as providing security and support through acts like helping them follow the guidelines, like gifting face masks, and acts that put patients at the centre of care during Covid, like longer visiting hours at private facilities.

Appreciating simplicity and control. The category explains how, while seeking care, community members preferred simplicity and opportunities for empowered care through communication, especially during Covid.

'Preferring the least effort to receive care'

Community members described choosing care required the least effort from them and appreciated factors that simplified care. Fast care was universally perceived to be 'good', because it reduced the amount of time patients needed to spend away from other activities, like working. Things that simplified the process, like electronic medical records or clear referral pathways, were appreciated.

Community members described an unintended yet highly positive effect from Covid on certain common problems at public and mission facilities. For instance, they reported clearer signage in the hospitals, more compassionate and targeted attention from providers, and shorter waiting times during Covid:

> "They used to pay attention during Covid. There was nothing of waiting during Covid. We would just reach [the facility] and be attend to in express." – *Public sector Covid FGD*

While the positive consequences were greatly appreciated, community members did not change their preference for care during Covid based on these consequences alone. Fast care remained a primary consideration: those who could afford it chose the fastest care at private facilities. Those who could only choose a public or mission facility opted for the facilities that were known to be fastest or the facility that they thought was most likely to have medications in stock, to eliminate the extra work of sourcing them.

'Losing control without communication during Covid'

Irrespective of Covid, community members depicted a precedent across all sectors for open and free communication with providers about their care, as long as there was time and the right atmosphere. Communication was viewed as a two-way street, with patients expected to do their part. FGDs and interviews both described patients as free to ask questions, express concerns, or speak out about issues they encountered at facilities, without hesitation:

> "In the time they have given you, you are free to ask questions, voice your opinions, and where we have not understood, we ask questions. Even when he prescribes the medication, we ask about how it should be taken." – *Mission sector Covid FGD*

> "Everybody is given a chance [to air out their opinions] because when they go in there, they are in one-on-one. So everybody is given a chance to complain and to listen, to hear what they are advised to do, and what the outcome is." – *Child health nurse, mission facility*

In all facilities, having time to explain, be listened to, and get answers about what was wrong and why—at an appropriate level and in the right language—was seen as fundamental to feeling empowered. Community members reported feeling lost and out of control without communication, such as not knowing why a medication was prescribed. Communication gained added relevance during Covid because discussion alleviated concerns about the disease, testing, and treatment:

> "The other thing I liked is that when someone came to test for Covid, they would teach us, in case those that watched on the TV did not understand. So they had enough time to teach people about Covid." – *Private sector Covid FGD*

However, public and mission facilities had less time to communicate with patients during Covid. They were depicted as overwhelmed by staff shortages and the high volume of patients they received as Covid centres. Community members were already dissatisfied with the lack of time they had with providers at public facilities (and to a lesser extent, mission facilities). Although Covid led to shorter waiting times, it also reduced the time for communicating with providers, leaving them feeling out of control over their care:

> "You know, counselling is very important. When I reach [the hospital], they have to counsel me on things. I should not expect a scenario where you reach there, they just fill in forms for you and inject you without your consent. When that happens, you don't even what is happening because you are in shock." – *Public sector Covid FGD*

'Communicating the truth'

Valuing tangible truth over lies during Covid. The category describes how community members suspect that both the public and private sectors are lying to them for their own gain. When unsure whom to believe during the uncertainty of Covid, community members trusted tangible experience and information.

'Profit as a motive for lying'

Community members expressed suspicion of the motives behind services at public and private facilities. Private facilities were described as greedy, as lying to patients to maximize business profits. They made profits by practices like ordering unnecessary diagnostic tests. Public and mission facilities were seen as exempt from greed because they did not charge for services.

However, community members worried that the government—and by extension, the public sector—was lying about Covid for political reasons, so that the government itself could profit at the expense of the population:

> "The opposition political parties were saying there was no Covid, then the government was saying there is Covid. Then when you watch BBC, you would see how people were dying. But here we took it as a simple thing and we thought that it was a way for these people to make money." – *Public sector Covid FGD*

Community members explained that they felt used when the government followed its own interests and was believed to be profiting from Covid. They associated feeling used with the Covid guidelines, noting their limited autonomy over decisions concerning masking, testing, and vaccination, which were often expressed as enforced without consent:

> "I have the right to reject a Covid injection and I have the right to accept the Covid injection but in those times, it was compulsory. Whether you liked it or not, you were given an injection as though you were a sacrificial lamb then." – *Public sector Covid FGD*

'Who is telling me the truth?'

Compared to private facilities, community members expressed a more tentative belief in providers' technical and clinical expertise at public and mission facilities. Their belief was based on positive experiences at these facilities and on communal knowledge of which facilities were expert, and was threatened if

providers made mistakes, gave inconsistent information, or contradicted themselves.

Inconsistency raised deep doubts in community members about who would tell them the truth about their health and care. Covid heightened doubts due to concerns over whether the government was benefitting from Covid and because of the ever-changing nature of Covid information during the pandemic, including the delivery of Covid services:

> "Doubts were there because they told us that we only had to get one [Covid vaccine] injection, which is Johnson, and we will not need to get any other injections. But now they are saying that there are boosters and because of that, people tend to have some doubts that maybe there is something in the injections." – *Private sector child health FGD*

'Valuing tangible truth during Covid'

When feeling used and facing uncertainty, community members discussed how they valued tangible information, like test results, across all sectors. 'Seeing Covid with your own eyes' reduced suspicions that the disease was fake. Test results were seen as trusted, objective indicators of truth, and community members trusted their own experiences over potentially subjective information:

> "When you go [to the facility], you have the symptoms and you even know that you have Covid. So when they test you and tell you that you are negative, you have to believe." – *Private sector Covid FGD*

Gaining Covid legitimacy through a shared identity and spaces. The category describes how sharing an identity and social spaces enhanced the legitimacy of the public and mission facilities, along with the community's trust in Covid information from those facilities.

Across all types of FGDs, community members perceived public and mission facilities to be for Zambians 'like us', described primarily as not wealthy and not highly educated. The public facilities were viewed as dedicated to helping the average person without prejudice for their status.

Comparatively, private facilities were for 'others', such as the wealthy, the highly educated, or foreigners.

> "You may have some delays when you go to a government hospital, but they will make sure that you get treated just because they are trying to help all of us. It's not, it's not every time that we have to go to a private clinic, because their status is different." – *Private sector Covid FGD*

Community members who used public and mission facilities often knew and lived in the same communities with the providers, particularly in rural areas. During Covid, community members appeared to accept public and mission facilities as community institutions due to the shared spaces. Unlike private facilities, public and mission facilities were actively engaged with communities during Covid, through activities like community sensitization that provided consistent, factual Covid information. Community members expressed trust in the Covid information that came from these known providers and facilities over other sources of information, which helped them identify misinformation:

> "At the hospital, there was one nurse at the entrance who taught people how to prevent Covid. So the more this nurse taught, the more people were coming to the hospital, and people were slowly changing their mindsets." – *Public sector Covid FGD*

Discussion

This study exploring perceptions of community trust between the public and private sectors found that institutional, macro level trust in the public sector appeared to remain through Covid, influenced by common spaces, values, and identities with communities. The private sector seemed to maintain its own legitimacy at all levels through the quality of its services and its identity as a non-governmental business. Although the quality of interactions was crucial to interpersonal trust across the sectors, it appeared to play a smaller role than identity did for legitimacy during Covid.

The macro level of the public health sector seemed to retain its legitimacy throughout Covid. Communities appeared to trust the values and principles guiding the public health sector—the lack of greed, its purpose to serve and help the average Zambian, its mission to control Covid—despite the frequent challenges and failures that users experienced. However, the public sector's legitimacy was challenged by negative perceptions of the government itself, such as the suspicion that it was lying about Covid to profit (e.g. to obtain donor funds). Earlier literature has shown that government and health system legitimacy are linked during health crises like epidemics (Arthur et al. 2022; Martineau 2016; Saulnier et al. 2022). In this study, the community clearly saw the public sector as part of the government, and the results present a tension between suspicion of the government and belief in the added value of the public sector, such as the trust in Covid information that came from public facilities. Outcomes like the desire to feel secure and supported may have been a way to reconcile government mistrust with the need for care. Future research could explore whether this tension changes over time, such as shortly after shock onset compared to the recovery period.

The private sector, however, was seen as completely separate from the government and from the overall Covid response. It was highly valued for specific attributes (e.g. speed of services, customer care) regardless of Covid and it played no discernible role in the pandemic *except* as a provider of continuously patient-centred care. This suggests that first, the private sector does not appear to depend on the public sector for legitimacy in the context of Covid. The public sector's apparent shift towards increased trust for Covid—becoming a central figure of Covid expertise and trusted Covid information despite low levels of trust prior to Covid and continued issues throughout the pandemic—appeared to have no influence on belief in the private sector. This should be explored further for non-health shocks, where the public health sector may have a smaller role in the governance and management of the overall shock. Second, this suggests that the legitimacy of the private sector is driven by other values and principles than the public sector. While the public sector and the government shared an identity with communities, the private sector's business-oriented identity may have been enough to bring it macro-level legitimacy as a service provider, without a more socially oriented perspective that public sectors and governments may need to adopt as controllers of the shock (Fattore and Tediosi 2013). Third, communities may not think the government is responsible for or capable of controlling the private sector during Covid. Believing that the private sector is only regulated by and accountable to its own principles is likely to influence choice in provider (Arakelyan et al. 2021)—observed in this study through the strong draw of private businesses offering customer care during Covid—that could further widen gaps in equity and increase health expenditure for communities during shocks (Dasgupta et al. 2020; Gupta 2020).

Although the public sector was seen as belonging to the government, it gained distance from the government by being the Covid health experts. This is likely because Covid was a health

shock, and also because the health sector remained close to the community as Covid controllers and a source of Covid care and information. The public sector already shared spaces with the community and undertook an extensive community sensitization campaign during Covid (Ministry of Health and ZNPHI 2022), which bolstered trust in information during Covid. It is possible that this regular contact and interaction, in both communities and facilities, supported the continued macro-level, institutional legitimacy of the public sector during Covid (Arakelyan et al. 2021; Luhmann 2000), compared to the 'remote' government and private sector (Campos-Castillo et al. 2016; Vinck et al. 2019). Recent research has observed that challenges with translating regulations from national governmental level into knowledge and information at local governmental (e.g. police) and community levels influenced legitimacy during Covid (Lund-Tønnesen and Christensen 2023b). In conjunction with our findings, this suggests that bottom-up legitimacy from close-to-community spaces is crucial for for crisis management during health shocks. Whether this would apply in non-health shocks remains to be seen, although similar findings have been found for trust in services in Zambia irrespective of shocks (Zulu et al. 2021).

Across all sectors, the quality of interactions seems to be a driver of interpersonal trust, at the micro level (e.g. provider attention, attitude, communication) and meso level (e.g. waiting times, expertise). The impact of Covid on interpersonal trust is unclear. The negative beliefs and experiences with the public sector in this study are consistent with earlier research in Zambia (Topp and Chipukuma 2016) and did not appear to change during Covid, while the private sector (and to some degree, the mission sector) maintained its high degree of interpersonal trust throughout. However, the results do not suggest that behaviour, such as choice in provider, changed as a result of interpersonal trust. For example, while Covid shortened waiting times at public facilities, this was not stated a reason to choose them over another option. This suggests that interpersonal trust in providers and facilities may have a limited impact on adherence to recommendations or service utilization during shocks like Covid. If this is the case, then the public sector's legitimacy as controllers of the pandemic in Zambia appears to be more closely linked to shared spaces and identity than to interpersonal trust.

Trust in the mission sector appeared to be influenced by whether communities perceived it as part of the public or private sector. Communities felt the mission sector offered generally higher quality services than the public sector, which aligned it with the private sector, while being closer to communities and prone to organizational challenges in the same way as the public sector. Since most participants had experience with services in both sectors in their lifetimes and trust was strongly experiential in this study, these perceptions seem to be mostly based on experience rather than sources like social narratives. In broadly religious contexts with wide-spread faith-based services like Zambia, the public sector may be able to capitalize on the mutability of the mission sector's identity during shocks to increase their own legitimacy, for example by utilizing them further in community engagement (Gilmore et al. 2020).

Limitations of this study included difficulty in enrolling private sector key informants and an ongoing vaccination campaign during data collection that limited the availability of public and mission sector key informants and led to shorter interviews with them. We dealt with this by conducting more interviews and were able to collect data with sufficient power. However, holding more private sector interviews may have provided richer information. Discussions during the FGDs and interviews tended to focus on hospital-based services, since Covid care has primarily been available there. Although some of the results, like those on shared spaces, may be transferable to lower-level services, it is unclear whether the findings would apply to highly specialized services. Additionally, there were no discernible differences in descriptions of trust between Covid services and child health services. The omnipresence of Covid at all facilities may have overshadowed factors specific to child health services that influence trust.

Conclusion

The public and private sectors likely have different pathways to legitimacy, both of which may be influenced by identity. The factors associated with trust that prevailed in both sectors, such as humane treatment in the private sector and shared spaces in the public sector, should be acknowledged in order for the health system to effectively use its capacity for resilience. Potential levers for increasing the health system's legitimacy and therefore resilience during shocks include improving the quality of interactions at public sector facilities to bring them in line with private sector standards; emphasizing the public sector's identity as a public, communal service and its place in the community; and acknowledging and clarifying the relationship between the public sector and the government in relation to a shock.

Data availability

The datasets generated during and/or analysed during the current study are not publicly available. Making the full data set publicly available could potentially breach the privacy that was promised to participants when they agreed to take part, in particular for the individual informants who come from a small, specific population, and may breach the ethics approval for the study. The data are available from the corresponding author on reasonable request.

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Author contributions

DDS – Conceptualization, Methodology, Data collection, Analysis, Writing (Original and Review), Funding acquisition. CS – Data Collection, Analysis, Writing (Review). TH – Data Collection, Analysis, Writing (Review). JMZ – Analysis, Writing (Review). JZ – Data Collection, Analysis, Writing (Review). FM – Methodology, Writing (Review).

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Competing interests

The authors declare no competing interests.

Ethical approval

Approval to conduct the study and analyze the data were given by the University of Zambia Humanities and Social Sciences Research Ethics Committee (no. HSSREC-2022-Mar-031) and the Swedish Ethical Review Authority (no. 2022-03095-01).

Informed consent

The Zambian National Health Research Authority, Ministry of Health, provincial health departments, district health departments, and facilities all granted permission to conduct the study. All participants consented verbally and in writing or by thumbprint prior to taking part. No participants withdrew from the study.

Additional information

Supplementary information The online version contains supplementary material available at https://doi.org/10.1057/s41599-024-02913-w.

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