‘It Was Hell in the Community’: A Qualitative Study of Maternal and Child Health Care During Health Care Worker Strikes in Kenya

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Abstract

Background:

Health care workers in Kenya have launched major strikes in the public health sector in recent years but how strikes by health care workers affect health systems and services is under-explored. We conducted a qualitative study to explore maternal and child health care and services during nationwide strikes by health care workers in 2017 from the perspective of pregnant women, community health volunteers (CHVS), and health facility managers.

Methods:

We conducted interviews and focus group discussions (FGDs) with three populations: women who were pregnant in 2017, CHVs, and health facility managers. Participants were part of a previous study and recruited using convenience sampling from a single County in western Kenya. Interviews and FGDs were conducted in English or Kiswahili using semi-structured guides that probed women's pregnancy experiences and maternal and child health services in 2017. Interviews and FGDs were audio-recorded, translated, and transcribed. Content analysis followed a thematic framework approach using deductive and inductive approaches. Data were collected March to July 2019. All participants provided written informed consent.

Results:

Forty-three women (mean age 28) and 22 CHVs (mean age 47) participated in 4 FGDs and 3 FGDs, respectively, and 8 health facility managers (mean age 38) participated in interviews. CHVs and health facility managers were majority female (80%). Participants reported that strikes by health care workers significantly impacted the availability and quality of maternal and child health services in 2017 and led to indirect economic effects due to households paying for services in the private sector. Participants overwhelmingly felt it was the poor, particularly poor women, who were most affected since they were more likely to rely on public services, while CHVs highlighted their own poor working conditions in response to strikes by other health care workers. Strikes strained relationships and trust between communities and the health system that were identified as particularly important to maternal and child health care.

Conclusion:

The impacts of strikes by health care workers extend beyond negative health and economic effects and exacerbate fundamental inequities in the health system with important implications for health systems strengthening and universal health coverage in Kenya and other countries.

Background
Kenya has experienced major strikes in the public health sector in the past decade. Public sector health care workers have used strikes to protest a wide range of issues, including low pay, poor working conditions, corruption, and breaking of collective bargaining agreements by the government, among others [1]. Strikes have accompanied significant reforms in Kenya, most notably expanded labor rights for workers (including health care workers) to form unions and devolution of health services from the national government to 47 newly created County governments under the new 2010 Constitution [2]. The most protracted strikes occurred in 2017 when public sector physicians launched a 100-day nationwide strike that was followed by public sector nurses who launched their own 150-day strike. Clinical officers, who are mid-level, physician-assistant clinicians in Kenya [3], launched their own 20-day strike led by their union in the midst of the nurses’ strike.

The impact of strikes on health systems and services is under-explored. To date, much of the literature uses facility data on inpatient utilization trends and mortality [4–6], and we know little about the impacts on primary and community-based services. While it is difficult to generalize the impact of strikes across cases and settings [7], studies in Kenya show that recent strikes are associated with significant decreases in inpatient admissions and outpatient visits in public health facilities [1, 8], but the relationship between strikes and mortality is less clear [9–11]. The impact of strikes on maternal and child health services and outcomes has not been adequately explored [12]. In addition to the potential impact of strikes on health services and outcomes, strikes may affect important relational aspects of care between communities and health systems that are difficult to quantify [13].

Maternal and neonatal mortality remains a significant public health issue in Kenya [14]. The country did not achieve targets for reductions in maternal and child mortality by 2015 set by the Millennium Development Goals, and progress has been inequitably distributed, particularly for poor and rural communities [15]. In 2013, the government instituted the Free Maternity Scheme that abolished user fees at public primary care facilities and delivery fees at public hospitals. In 2017, the government launched a new scheme called Linda Mama to cover maternity services, including antenatal care (ANC), delivery, and postnatal care, under the national health insurer, the National Hospital Insurance Fund. These policies have been associated with moderate increases in outcomes like ANC coverage and delivery with a skilled birth attendant, but there continue to be major challenges in implementing policies and interventions to improve maternal and child health [16–20].

To investigate the impact of the prolonged strikes by health care workers in Kenya in 2017 on maternal and child health care and services, we conducted a qualitative study using interviews and focus group discussions (FGDs) with women who were pregnant during strikes in 2017, community health volunteers (CHVs), and health facility managers in one county in western Kenya.

Methods

Study design and participants
We conducted a qualitative study using interviews and FGDs with three types of participants. Women who were pregnant in 2017 were invited to participate in FGDs. Eligible participants were recruited as part of a different study called *Chamas for Change*, a cluster randomized controlled trial to evaluate the effectiveness of a CHV-led, group-based model of care to improve maternal child health in Trans Nzoia County in western Kenya. At the time of enrollment into the *Chamas for Change* study, participants were 18 years of age or older, pregnant, and less than 24 weeks gestation based on last menstrual period. Additional details on the parent study are provided elsewhere [21]. Using contact information provided for the *Chamas for Change* study, we contacted women by phone or in person with a CHV to see if they would be interested in participating in this study. Purposive sampling was used to ensure women in both peri-urban and rural communities were invited to participate in FGDs.

CHVs and health facility managers were also recruited using convenience sampling for FGDs and in-depth interviews, respectively. CHVs were volunteers (i.e., they did not receive salaries) who were nominated by their community, worked under the supervision of a facility-based community health extension worker, participated in the *Chamas for Change* training program, and were serving as a CHV in Trans Nzoia County in 2017. Health facility managers were in management-level positions at either public sub-county hospitals, County referral hospital, or private hospitals in Trans Nzoia in 2017, and were significantly involved in the management and coordination of maternal and child health services at the facility or community level.

**Data collection**

Data were collected between March and July 2019. All participants provided written informed consent to participate. In-depth interviews and FGDs were conducted by trained study research assistants in English or Kiswahili and audio recorded. Interviews lasted between 30 minutes and one hour and FGDs lasted between two and three hours, with six to ten participants per FGD. Facilitators used a semi-structured guide. For FGDs with women who were pregnant in 2017, a semi-structured guide asked women to recount their pregnancy journey in 2017 and any challenges or barriers they faced in accessing care. For CHVs and facility managers, semi-structured guides probed experiences delivering maternal child health care during 2017, any disruptions to care, and strategies to cope with disruptions. Questions specifically about strikes and their impact on maternal and child health care and services were left to the final section to allow discussions of strikes to emerge inductively. Demographic characteristics of study participants were collected prior to the start of interviews and FGDs.

**Analysis**

Audio-recorded interviews and FGDs were transcribed and translated into English (if necessary) by study research assistants. Transcripts were imported into MAXQDA (Version 18.0, VERBI GmbH, Berlin, Germany) for preliminary coding by two investigators (MLS and LYM). Content analysis of data followed a thematic framework approach with preliminary coding using both deductive and inductive approaches. An initial set of codes and themes were defined with additional codes and themes developed inductively through review and re-review of transcripts with team members (JEI, AJ, GA, JCK, and SC). Team
members were deeply knowledgeable about maternal and child health care and services in this community having worked in maternal child health programming for many years. Illustrative quotes of major themes were identified and are included in-text.

**Results**

Seventy-three individuals participated in the study, including 43 women who were pregnant in 2017 (mean age 28), 22 CHVs (mean age 47), and eight health facility managers (mean age 38). Both CHVs and facility managers were predominately female (80%). Five health facility managers were nurses, two were public health officers, and one was a community health extension worker (a formal, paid position based at a facility that includes managing a team of CHVs and is usually trained as a nurse or public health officer), with five working in public facilities and three working in private facilities in 2017. CHVs had a median of 11 years of experience (range seven to 30 years) while health facility managers had a median of four years of experience (range two to 33 years) in their position.

“Everyday” challenges in maternal child health care

Participants identified several important barriers to maternal and child health care not related to strikes, including cost of care, long distances to and wait times at facilities, understaffing and drug stockouts, and disrespectful maternity care. Decision making related to facility-based care was complex with women making tradeoffs between care at facilities that they thought was of higher quality, particularly in emergencies, and care from traditional birth attendants that was more likely to be compassionate, confidential, and less expensive. Another challenge to maternal and child health care was confusion about costs of services and what services were covered under new initiatives like Linda Mama. In many cases it was unclear to women and even CHVs whether fees charged for various maternal and child health services were legitimate or whether they were informal charges or even bribes to providers. These “everyday” challenges were important factors in shaping care seeking decisions and quality of care, and they existed apart from issues of strikes.

**Experiences of maternal child health care during strikes**

While “everyday” challenges were important, the majority of participants identified strikes by health care workers as the most significant barrier to maternal and child health care in 2017. Participants said that many pregnant women during the strike could not access or delayed ANC, were less likely to deliver in a health facility, and that women who did were more likely to deliver in private facilities. Some women’s experiences during pregnancy were deeply traumatic and chaotic, including several stories of family members or friends dying in childbirth or losing their child during the strike. As one woman said of her community’s experiences during the strikes, “[they] will be in our memories for a long time to come,” (FGD with women, Group 2, Participant 8). CHVs and health facility managers noted the psychological toll the strikes took on health workers as well, with one facility manager remarking,

“I really suffered as a person because there was so much suffering, and they come to look at you, you are to solve everything...So me, personally I could not even sleep.” Interview with facility manager, Participant
Women and CHVs often did not differentiate between health care worker cadres when speaking of strikes, however, there was an understanding that maternal and child health services were “nursing”

duties and were generally not performed by other cadres of health care workers even when nurses were on strike. This made pregnant women especially vulnerable during nurses’ strikes, with several CHVs and health facility managers referencing spikes in maternal and child deaths and mother-to-child transmission of HIV due to decreased utilization of ANC. As one facility manager said,

“The strike really affected people from my community, especially the pregnant mothers because maybe she attended her first ANC visit but when she came back for her second, there was the strike. So, she didn't come for the third, and she defaulted and never met the fourth ANC visit… There were mothers supposed to deliver in the facility accompanied by their birth attendant, but as soon as they heard of the strike, they opted to deliver at home and [this] really affected [their] health.” Interview with facility manager, Participant 1

Strike-related inequities in maternal child health services

Strike-related barriers to care were not equitably distributed across communities, and participants highlighted that it was poorer women and children who were most negatively affected by strikes since they were less likely to have the resources to access care in private facilities where most services remained operational. Inequities in terms of the impact of strikes on maternal and child health was a major theme – i.e., that the poor were often left completely without access to care during strikes while a better off minority was largely unaffected because they could pay for care in the private sector. As one facility manager said,

“It was hell in the community...Because most people affected are the common ones, the poor ones, the common “mwananchi,” [they] are the most affected because you will find the fairly well-off people are able to access services elsewhere. But now you find the local community suffers the most,” Interview with facility manager, Participant 8

Participants also highlighted the significant economic impact on some patients and communities from payments for care that had the potential to push families deeper into economic insecurity and poverty. One CHV described strikes as “creating poverty” because sick family members could no longer work, and households spent livelihoods and savings to access care in private facilities:

“The strike came and even created poverty in the community because now the person is sick, they take their land and they lease, they lease the land even when the person lives there, there is no food at home, children are unable to go to school. This thing largely affected [the community].” FGD with CHVs, Group 2, Participant 2

Relational dimensions of strikes in the health system
Another major theme that emerged was how strikes impacted key relationships in the health system, including patient-provider and community-CHV relationships. Health facility managers and CHVs spoke at length about their efforts to build relationships and trust with communities that were essential to improving maternal and child health services and affecting decisions about care seeking, particularly for pregnant women. Strikes by health care workers strained and sometimes severed these relationships between the community and health system. As one facility manager put it,

“When you work in a hospital, you create a relationship with the community…but when there is a strike, they don’t understand why you cannot assist…they tend not to trust us again…It really affected me. We have invested so much in community health…but because of the strike the relationship that we had built was broken, [and mothers] went back to the traditional birth attendants.” Interview with facility manager, Participant 7

CHVs felt they were put in impossibly difficult situations during strikes, receiving little guidance from their supervisors about what services remained open and directions for referring patients to care. One CHV described their experience with a woman who was delivering during the strike, saying,

“I had to take the responsibility of taking her to a Mission hospital, but I was told by the doctor in charge that there were no free services and we had to pay at least some money. Since I wanted to help her, I had to use my own money so that she could deliver safely… I had to help her because the community trust in me. When I help them in good and bad times, they will continue trusting in me just the way she did.” FGD with CHVs, Group 1, Participant 2

**Strategies for maternal child health care during strikes**

There were no coordinated strategies at the County or national level that participants identified to keep maternal and child health services in the public sector operating during the 2017 strikes or to make services in the private sector accessible. Participants described ad hoc efforts often led by individual health care workers, CHVs, and by communities themselves. For health facility managers, this included waiving fees and hiring more staff at private (mostly faith-based) facilities, coordinating services, referrals, and supplies between public and private facilities, and delivering services at public facilities in secret or outside of the facility. For communities and CHVs, this often meant raising money or using their own money to pay for services for family members, friends, and community members.

Health facility managers and CHVs alluded to several strategies that could mitigate the negative impact of strikes in the public health sector, including for maternal and child health services. Several health facility managers suggested more formal links between public and private health facilities be established, and that this coordination could help in sharing resources across institutions and referring patients during times of crisis like strikes. CHVs advocated for more formal training and coordination so that they could better support their communities during strikes. Additional strategies to prevent future strikes included policy reforms to revert management of human resources back to the national government and addressing issues of corruption in the health system.
Perspectives on the legitimacy of strikes by health care workers

Participants expressed mixed feelings in terms of the legitimacy of recent strikes by health care workers. Some women and CHVs supported health care workers in their fight for “what was rightfully theirs” (FGD with women, Group 2, Participant 3), and believed they were fighting to ultimately improve the public health system and not just serving their own interests. Others were skeptical of striking health care workers for a variety of reasons, including health care workers “valuing money more than lives” (FGD with women, Group 3, Participant 3) and suspicions that physicians in particular benefitted because they owned private hospitals and clinics that profited from increased demand during strikes.

Several CHVs used the opportunity in discussions about strikes by health care workers to highlight their own challenging work environments, that their work was not adequately valued in the health system, and that they should be formally employed and paid by the government. As one CHV said,

“The CHVs are the people who work at the ground and yet those who are paid are in the offices. We walk around villages looking for those who have defaulted medications, and pregnant mothers who need to start their ANC visits... The government should recognize our work as CHVs and they should omit the V in Community Health Volunteer and replace it with the W to be Community Health Workers as it used to be... So, you need to remember us, because we are like your pillars. If we collapse, then you will also collapse.”

FGD with CHVs, Group 1, Participant 2

Discussion

Women who were pregnant in 2017, CHVs, and health facility managers revealed the various ways that recent health care workers’ strikes impact maternal and child health care and services in western Kenya. First, strikes in the public sector significantly increased existing barriers to and delays in basic ANC and primary care as well as emergency care during pregnancy that were disproportionately experienced by the poor. Our qualitative findings are supported by recent studies in Kenya that show strikes by health care workers are associated with significant declines in inpatient and outpatient admissions in public health facilities [1], and utilization of services like routine infant immunizations [12]. Several participants referenced people in their community dying due to strikes, and while the evidence on strike-related mortality in Kenya is mixed [9–11], studies relying on inpatient hospital data likely significantly undercount deaths that happen in the community [22, 23]. In addition, the potential effects of interrupted ANC, primary care, and early childhood immunizations may be only understood years or decades later.

Participants described a generally chaotic situation during recent strikes and a lack of coordinated efforts at the national and County level to maintain basic services for maternal and child health. Health systems resilience, which Kruk and colleagues define as “the capacity of health actors, institutions, and populations to prepare for and effectively respond to crises; maintain core functions when a crisis hits; and, informed by lessons learned during the crisis, reorganize if conditions require it,” [24] is a useful
concept for understanding internal and external shocks to health systems [25]. Scholars have used it to analyze various shocks to health systems, including infectious disease outbreaks, natural disasters, conflict, migration, and other political and economic crises [26–30], but the concept may also be well suited to understanding the capacity of health systems to respond to shocks such as mass health care workers’ strikes [31, 32]. We did not find evidence of systems-level strategies to cope and adapt with strikes but found that individual facilities, health care workers, CHVs, and communities employed their own strategies, consistent with findings published elsewhere [32]. These strategies were mostly “absorptive” and “adaptive” in nature, meaning they were short-term and limited in nature and less likely to represent “transformative” efforts to fundamentally alter or change the health system. CHVs, however, suggested more transformative strategies, such as paying CHVs and providing more supervision and training that could mitigate some negative impacts of strikes especially for primary and community-based care.

A major theme that emerged in our data was the importance of relational dynamics of maternal and child health care, particularly trust, and the impact strikes had on these critical relationships between communities and the health system. There has been increasing attention to the role of trust in health systems, particularly among scholars who understand health systems as inherently social and relational systems [33, 34]. Studies show that trust in providers, including community providers such as CHVs, can lead to a variety of improved patient outcomes such as health behaviors, adherence to treatment, patient satisfaction, and quality of life [35–37], but trust may be particular important and operate in specific ways in the highly gendered context of maternity care [38]. Many women in our study recounted experiences or stories of poor quality and disrespectful maternity care at facilities not related to strikes, consistent with other studies [39]. Research shows that perceptions of poor quality maternal and child health services among mothers, including long wait times, lack of providers and essential equipment and drugs, disrespectful care, and out-of-pocket payments, represents important barriers to seeking care [40]. In our study, CHVs and health facility managers described investing significant time and energy in building trusting relationships with women to improve utilization of services, but that these efforts were often damaged by health care workers’ strikes. It is unclear what the long-term implications of damage to these relationships between women, health care workers, and the health system, and whether recent strikes will have a long-term impact on women’s decision-making about seeking care and trust in the health system [13]. Notably, health care workers raised many issues related to poor care, including lack of investments in public health systems, as central to their motivations to strike [32].

Finally, strikes by health care workers exacerbated systematic and long-standing inequities in the health system. For pregnant women and others in need of care, this meant that it was disproportionately the poor who struggled most to access health care during strikes, while the financial burden of paying for care in the private sector sometimes resulted in pushing families and communities deeper into poverty. Addressing inequities in access to and utilization of health services is a major challenge in the Kenyan health system [41], and this study reveals the ways in which health care workers’ strikes may further entrench these inequities, both in terms of acute impacts on access to services during strikes as well as overall trust in these services that affect care seeking in the future. The 2017 strikes occurred as the
government was rolling out a universal maternal child health policy, Linda Mama, and while health care workers largely support universal health initiatives in Kenya, they feel unsupported and ill-equipped to implement these policies on the ground [42]. Additionally, in this study CHVs articulated their own precarious working conditions in the health system as unpaid but critically important actors when speaking about health care workers’ strikes. As debates about formalizing community-based health care workers in the health system continue [43], the potential for organizing and collective action among this cadre for better labor protections and decent work may become a new frontier of labor action [44].

There are several limitations to this study. We recruited participants from a single County in western Kenya, and our findings may not be generalizable to other parts of Kenya. Devolution of health services has led to significant autonomy among Counties in managing health services and health workforces, including on issues related to strikes, and it is possible that maternal and child health services were impacted differently across Counties. In addition to national level strikes, health care workers in Trans Nzoia County where this study was based led County-wide strikes, potentially creating additional challenges to maternal and child health services compared to other Counties in 2017. Our study took place about one and a half years after the 2017 strikes by health care workers and there is a risk of recall bias. In addition, the 2017 strikes by health care workers were major social and political events in Kenya with substantial media coverage, which may have created certain narratives. Facilitators of FGDs and interviews, who were familiar with the community and region, were trained to let discussions about strikes to emerge inductively from questions about barriers to and disruptions in maternal and child health care. Finally, participants often did not specify which health care workers’ strike they were referring to, so it was difficult to tease out how maternal and child health may be affected differently depending on what cadre of health care worker is on strike.

**Conclusion**

In this qualitative study, participants described significant impacts on maternal and child health care and services during the 2017 strikes by health care workers as well as negative economic impacts on households and strained relationships and distrust in the health system. Strikes exacerbated existing and fundamental inequities in the health system and addressing these inequities and rebuilding relationships and trust that undergird the health system will be critical to improving maternal child health care and initiatives for universal health coverage.

**Declarations**

*Ethics approval and consent to participate*

All study participants provided written informed consent to participate in study activities. Participants did not receive any compensation for participation. Participants were assigned a random study ID which was used to identify them in analysis. The study was approved by the Moi University and Moi Teaching and Referral Hospital Institutional Research and Ethics Committee (protocol: IREC/2016/269) in Eldoret,
Kenya and the Indiana University School of Medicine Institutional Review Board (protocol: 34173354) in Indianapolis, Indiana, USA. All methods were performed in accordance with the relevant guidelines and regulations.

Consent for publication

Not applicable.

Availability of data and materials

The data generated for the study is not publicly available. Requests for the qualitative analysis codebook and/or de-identified transcripts can be made to the corresponding author.

Competing interests

The authors declare that they have no competing interests.

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Authors’ contributions

MLS, LYM, JS, LR, and ACD were responsible for the initial study concept and design. JEI, AJ, GA, SC, JCK led the collection of study data. MLS, LYM, JEI, AJ, GA, SC, and JCK led the analysis of study data. MLS led the drafting of the initial manuscript. All authors provided critical feedback on various drafts of the manuscript. All authors approved the final version of the manuscript. JS, LR, and ACD served as co-principal investigators for this study as well as the parent study and are recognized by the authorship team as co-senior authors on the manuscript.

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