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'The medicine sellers have become the hospital now': Health service responses to violence against women during the Ebola and COVID-19 outbreaks in Sierra Leone

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ABSTRACT

Introduction: Outbreaks and violence against women (VAW) are interlinked public health challenges, yet health system responses for VAW during outbreaks remain poorly understood. We sought to understand how and to what extent health services for VAW in Sierra Leone were delivered by health providers and communities during the 2014–2016 Ebola outbreak and the COVID-19 pandemic.

Methods: Thirty-seven in-depth interviews and four focus group discussions were conducted in Freetown and Kambia in Sierra Leone in 2022 with health providers, outbreak actors, community members, and women who had experienced physical or sexual violence during the Ebola or COVID-19 outbreaks. Data were analysed thematically.

Findings: Many participants described the exacerbation of long-term health system challenges during the outbreaks, with survivors of violence facing under-resourced, broken or corrupt government health services. Especially during the Ebola outbreak, systems of care for VAW survivors were reconfigured with the role of informal health actors such as medicine sellers and traditional healers amplified. VAW providers described adaptations to health service delivery and ways that they tried to cope with difficult working conditions: plugging gaps in commodity supplies, adopting infection prevention and control protocols or making personal sacrifices so that systems functioned. Whilst VAW health services faced significant challenges continuing to provide care, they were overlooked by the outbreak response.

Conclusions: The outbreaks, especially Ebola, meant 'normal' service delivery challenges for VAW were heightened. These findings highlight the need to integrate VAW services into outbreak preparedness and response efforts, including through leveraging informal actors.

Background

Recent experiences with Ebola in West Africa, and Zika and COVID-19 globally, have led to a consensus that the key to managing outbreaks lies in strong health systems, including maintaining health service delivery for women and girls (Smith, 2019; Wenham, 2021; Wenham and Davies, 2021). Essential health services for women have historically been deprioritised during outbreaks, including maternal, sexual and reproductive health, and violence against women (VAW) services such as medical, psychosocial support, and multi-sectoral referrals. Recent outbreak responses have been critiqued as being characterised by the 'tyranny of the urgent', and prioritising response against the virus over other health concerns (Smith, 2019). This has often resulted in VAW services being seen as non-essential, delaying care and further entrenching gendered health inequities. Globally, one in three women worldwide has experienced physical and/or sexual violence by an intimate partner or sexual violence by a non-partner at some point in their lives, leading to adverse physical, mental, and sexual and reproductive health consequences (WHO, 2021). During epidemics drivers of VAW such as entrenched gender norms and inequities, crisis related instability

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and economic stress, and stigma around infection are magnified, particularly when movement restrictions mean women cannot escape abusive partners (Gilbert et al., 2015; Peterman et al., 2020; Roesch et al., 2020). During the COVID-19 pandemic alone, 31 % of women globally experienced intimate partner violence (IPV) (Kifle et al., 2024). However, essential health services for women including services for violence, have been closed or disrupted during recent public health emergencies and there is limited understanding of how to strengthen service delivery during future outbreaks (CARE, 2020; Fraser, 2020; Peterman et al., 2020; Smith, 2019; Wenham et al., 2020).

The health system has an essential role in supporting survivors of VAW, both within and outside outbreak periods. Health system responses to VAW must be multi-faceted, going beyond clinical considerations to consider both health system 'hardware' such as clinical protocols, resources, and infrastructure, and 'software' such as provider, client and community attitudes, and provider's willingness to address VAW (Colombini et al., 2020). A minimum package for survivors during emergencies emphasises post-rape treatment such as post-exposure prophylaxis for HIV, emergency contraception, antibiotics, sexually transmitted infection (STI) treatment, pregnancy tests, as well as treatment of injuries, psychological first aid, mental health care, and multi-sectoral referrals including to justice and housing services (UNFPA, 2015). However, across many low- and middle-income country settings, VAW service delivery is fragmented and ad hoc even outside outbreak periods, and this package of support may not be available normally, moreover survivors are often reluctant to seek help from the formal health sector. During crises, services are predominantly managed by international non-governmental organisations (NGOs), but these services may not be tailored to address IPV, which is highly prevalent.

Sierra Leone has experienced multiple recent outbreaks. The largest global outbreak of Ebola in West Africa from 2014 to 2016 led to almost 4000 deaths nationally in Sierra Leone (WHO, 2016a). Violence against women and girls increased with the closure of schools (which had served as protective spaces in the community), economic stress, and sexual exploitation and abuse perpetrated by civil-military responders was reported. Survival sex increased amongst girls who had lost caretakers to the virus contributing to a 65 % increase in teenage pregnancies (Benton, 2017; Minor, 2017; Onyango et al., 2019). Violence was linked to the heavily militarised outbreak response and there were punitive actions against those in the community who violated government mandates on burial, case reporting and caregiving (Benton, 2017; Onyango et al., 2019). The outbreak occurred in the aftermath of the civil war (1991–2002) during which VAW was a defining feature, perpetrated against an estimated 275,000 women and girls. With the Truth and Reconciliation Commission and growth of civil society action, VAW was placed at the top of national political agendas and discourses (Mills et al., 2015; Onyango et al., 2019; Schneider, 2019). During the Ebola recovery period in 2019, the government launched a prominent, and mostly justice-based, campaign against gender-based violence, declaring it a 'national emergency' and pledging that survivors of sexual assault would be provided free medical services at public hospitals (this has however not been implemented)[1](M'Cormack-Hale, 2021). This was followed by the First Lady's 'Hands off our Girls' campaign against gender-based violence. In March 2020, a 12-month state of emergency was declared in anticipation of the impact of COVID-19 in Sierra Leone. Whilst cases were limited (<7700 cases were recorded at the time of the study), various triggers for VAW and disruptions to health services took place. This included inter-district movement restrictions, fuel shortages, income loss and economic stress, (short) stay at home orders, and avoidance of health centres as people feared infection inside facilities as they recalled during the Ebola period (Kasonia et al., 2023; Lees et al., 2022).

Health service provision for VAW is extremely limited in Sierra Leone, regardless of the disruptions that outbreaks pose to service delivery. More broadly, access to sexual and reproductive health including maternal and child health services suffers from challenges such as human resourcing, informal payments requested of patients, commodity shortages, and poor quality service provision. In addition, survivors rarely access the health system, except for very severe (physical) injuries, or for violence considered transgressive,such as the rape of a child (Burns et al., 2024; Schneider, 2019).

The only organisation offering free health services to survivors in Sierra Leone at any scale is Rainbo Initiative. Clinical and psychosocial support is offered across five centres, and in 2020 it assisted over 3500 survivors, the majority of whom were adolescents (Rainbo Initiative, 2020). One Stop Shops run by the Ministry of Social Welfare, Gender and Children's Affairs in district towns are a second provider and were reported to reach a small number of survivors (532 in 2020) (UNFPA, n.d.).

In this paper, we address three key gaps in the literature: i) limited evidence on how health systems in low-resource settings sustain VAW services during outbreaks; ii) limited understanding of the adaptations and informal strategies used by health workers and communities to maintain healthcare for VAW survivors; and (iii) a lack of documentation on how outbreak response frameworks can better integrate VAW service delivery.

We focus on physical and sexual violence during the Ebola and COVID-19 outbreak periods, given that these forms of violence are a focus for health service interventions. This paper examines how, and to what extent, VAW health services continued to be delivered by the health system and communities in Sierra Leone during the Ebola and COVID-19 outbreaks. We also explore the facilitators, challenges and potential adaptations to service delivery during these periods.

Methods

This study used qualitative methods and combined both case study and phenomenological research designs.

Study setting

This study was one component of longstanding social science research on community preparedness for outbreaks conducted alongside a number of clinical trials to test new prophylactic Ebola vaccines (EBOVAC3 and PREVAC-UP) which began in Kambia district during the West African Ebola outbreak in 2015 (Enria et al., 2016; Lees et al., 2022; Mooney et al., 2018; Tengbeh et al., 2018; EDCTP2, n.d; IHI). A number of these studies continued during the COVID-19 pandemic between 2019-2022.

We drew on qualitative data from both Kambia district and the city of Freetown. These two sites offered contrast in terms of their experiences with health service provision for VAW. A majority of international NGOs, NGOs and national actors focused on VAW programming and outbreak programming are based in Freetown. In Freetown we recruited survivors of VAW from an NGO clinic which offered comprehensive, free, quality, age-appropriate medical care, psychosocial services, and legal aid information to survivors of sexual and gender based violence (SGBV). During 2020 this clinic saw over 1400 cases, with adolescent girls comprising the largest group of users. This setting allowed us to examine health service experiences in a relatively well-resourced, vertical VAW health service delivery setting.

Kambia is a predominantly rural district on the Sierra Leone-Guinea border with experience of multiple recent outbreaks. It was heavily affected by Ebola with almost 300 cases from September 2014 to September 2015, and was a pivotal location in efforts to end the outbreak nationally (NERC, 2015). Kambia's population is around 350,

[1] The 2007 Domestic Violence Act and the 2012 Sexual Offenses Act mandated that free medical exams, treatment, and certificates should be provided to survivors, however this was not implemented according to government reports (M'Cormack-Hale, 2021)

000 (2015 census) served by 71 public health facilities and only one referral government hospital with limited facilities, two Medical Officers (three in the District in total) and intermittent access to power (DHMT, 2020). There are few interventions for VAW other than justice services offered through the Kambia Family Support Unit (FSU), a specialised unit of the police tasked with investigating gender-based violence (GBV), and some NGO and government prevention programming. An NGO clinic offering free clinical and psychosocial support to survivors opened at the Kambia government hospital in 2022, however few survivors were presenting to this clinic at the time of the study. Prior to this, survivors identified were meant to be offered basic care and referred to the Ministry of Gender 'One Stop Centre' 50 km away in Port Loko for medical services, as well as the Kambia FSU for case investigations.

Sampling and recruitment

For the interviews, we recruited key informants including outbreak actors, health service professionals, informal providers who were involved in VAW treatment and care, and women who had faced physical or sexual violence during the Ebola or COVID-19 outbreaks. Community members, including those working with survivors such as informal justice actors, were recruited for the interviews and focus group discussions. Key informants and community members were approached using EBOVAC3 and Rainbo Initiative networks using purposive sampling to identify those able to provide insight into this topic. Snowball sampling was used to identify subsequent key informants. Across participant groups we recruited until we reached saturation with our themes.

Recruitment of survivors of VAW differed between sites. In Freetown, the study team recruited women who had accessed treatment and care primarily for rape at a relatively well-resourced NGO clinic; violence had mostly been perpetrated by non-partners. NGO clinic staff accessed patient files of survivors who attended the clinic at the height of the Ebola and COVID-19 outbreaks and invited them via telephone to be contacted by a research assistant. In Kambia, women who had experienced violence during the Ebola and/or COVID-19 outbreaks were contacted through community and EBOVAC3 networks. Participants had mostly faced intimate partner sexual and/or physical violence and may not have engaged with the health system at all, or may have engaged with relatively poorly resourced government services, or relied on community-based support. We only included survivors of physical and sexual violence aged 18 years and over at the time of the event, as other forms of violence fell outside the scope of this study.

Data collection

Thirty-seven in-depth interviews and four focus group discussions (FGDs) were conducted between September and December 2022 in Kambia and Freetown. Interviews were conducted with five outbreak actors including those who held government or civil society roles within the outbreak response (e.g. provision of psychosocial support), six community members including community leaders who mediate cases of VAW ('sababus'), sixteen women who had experienced violence during Ebola or COVID-19 outbreaks, and ten health service providers including both clinical staff who deliver services to survivors, but also informal providers such as traditional healers and medicine vendors (Table 1). Two focus groups with community members took place in Kambia and two in Freetown (Table 1). Interviews and focus group discussions were conducted by two trained research assistants (in Krio and Temne) and the principal investigator (in English). Interviews lasted on average 45 min in duration, and focus groups 95 min. Interviews were conducted in a private community space convenient for participants to reach, or in some cases their place of work, and they were provided with a transport reimbursement. The topic guides for interviews with providers (supplementary material 1) mapped service delivery before the Ebola outbreak, during the 2014–2016 Ebola outbreak, and during the recovery period and the onset of COVID-19. The goal was to build a picture of 'normal' VAW provision, which was likely very limited, VAW service provision during Ebola (e.g. disruptions or adaptations) and changes or lessons learnt for service delivery during the recovery period and the onset of COVID-19. Interviews with outbreak responders focused on how they considered essential health service delivery for women during the outbreaks.

Table 1
Study participants.

Participant characteristics	Data collection method and location			
Key informants (KIs)	*Interviews*		*Focus group discussions*	
	Freetown	*Kambia*		
• Outbreak key informants	2	3	-	-
• VAW health service key informants	*4*	6	-	-
Total key informants	***15***		-	
***Community* members**	*Freetown*	*Kambia*	*Freetown*	*Kambia*
• Community members	*3*	*3*	*2*	*2*
Total community members	***6***		***4***	
Women survivors	*Freetown*	*Kambia*	*Freetown*	*Kambia*
• IPV (sexual/physical)	*1*	*7*	-	-
• Non-partner violence (sexual/physical)	*7*	*1*	-	-
• 18–29 years (at interview)	*1*	*4*	-	-
• ≥ 30 years (at interview)	*7*	*4*	-	-
Total women survivors	***16***		-	
Total	**37**		**4**	

Topic guides with women survivors covered help-seeking pathways during outbreaks and the challenges or enablers they encountered in accessing these sources of support. Health system concepts including the Health Systems Wheel developed by Colombini et al. (2012) and García-Moreno et al. (2015) were used to structure the areas of inquiry for the topic guides. The Wheel includes three levels of health system response for VAW including: the health policy level, where priorities are set and coordination takes place; the health care delivery level where referral networks and protocols are implemented; and the level of the heath care provider and their training, attitudes towards VAW and skills.

The topic guides for both service providers and FGD participants included a visual mapping activity and vignette whereby a VAW survivor's use of services was drawn during outbreaks explaining where they went (in the case of FGDs with community members) and what was provided (in the case of service providers) at each of the steps (Adapted from McCarthy et al. (2016) and RREAL (2021)).

Data management and analysis

Interviews and focus groups were audio-recorded, transcribed and translated into English. Notes were taken during each interview by research assistants, which were used in daily debriefings following each interview between the research assistants and principal investigator (PI). Debriefings allowed for researcher reflexivity, reflection on interviewing skills, topic guides, sampling, and the collaborative development of analytical memos, which informed the development of an initial coding framework on health service delivery for VAW.

Transcripts from interviews and focus group discussions were coded together by the PI aided by NVivo12. Analysis was thematic and guided by the six phases of Braun and Clarke's (2006) approach which reflect the researchers' own interpretive analysis of the data. In developing themes, we drew upon two health systems concepts: the Health Systems Wheel, described above, and health system resilience. Health system resilience describes the capacity of health actors, institutions, and populations to prepare for and effectively respond to crises, and specifically to maintain the core functions of the health system (such as essential health services for women) during a crisis (Biddle et al., 2020; Blanchet et al., 2017; Campbell et al., 2015; Kruk et al., 2015). These two

Table 2
Summary of themes presented.

Theme	Description	Illustrative quote
1. Health services for VAW during 'normal' and outbreak periods	• Formal services for survivors were chronically under-resourced regardless of outbreaks. • Informal and community based providers (e.g. unlicenced medicine vendors, and 'sababus' (informal mediators)) were a first point of contact for survivors especially for violence seen as 'less serious' according to local norms. • Especially during Ebola, many areas of health service provision stopped or were disrupted. However, at the NGO setting in Freetown,quality treatment and care provision continued, this contrasted with reports of scarce provision in Kambia.	*"…the time that Ebola broke out, the health facilities were very poor. (Community member, Kambia)*
1. The role of informal providers during the outbreaks	• During the outbreaks women feared infection in formal health care settings. • Systems of care for VAW survivors were reconfigured with the role of informal health actors (e.g. medicine sellers and traditional healers) amplified. • At the same time many informal actors claimed they reduced their activities, or were banned. This followed both the outbreak restrictions and a ban on mediating violence in the community.	*"…the medicine sellers have become the hospital now. People believe in them. Instead of them coming to the main hospital they prefer to buy medicines, (VAW key informant, Kambia)*
2. Adaptations and endurance by providers delivering health services for VAW during the outbreaks	• During the outbreaks health providers endured salary gaps and difficult conditions, some were motivated by a sense of duty and moral responsibility to continue supporting survivors. • Some adaptions by providers took place such as adopting infection prevention and control measures and others described taking individual responsibility to make systems 'work'.	*"…we continued our work for the women in Sierra Leone so we continued pushing and we accepted and continued work until they start to pay us again, just small money by then." (VAW health service provider)*
3. Risks and challenges in delivering health services for VAW during the outbreaks	• Providers faced enormous challenges during Ebola, risking infection and working in chaotic conditions with stock-outs. • There was an absence of formal guidance and planning for VAW services during outbreaks.	*"Sometimes we had to jump over dead bodies in order to access our clinic" (VAW health service provider)*

frameworks informed our analysis and interpretation of results on the ways that different health system elements that respond to VAW were impacted, reduced or maintained by the outbreaks.

Six validation workshops were held with community members and stakeholders in order to confirm our initial themes. We used participatory tools during these workshops such as health service ranking activities to understand what services are useful to survivors and a 'SWOT analysis' (strengths, weaknesses, opportunities and threats) activity to understand challenges and successes for service providers.

Ethics

This study was approved by the Sierra Leone Ethics and Scientific Review Committee (reference: 020/08/2022) and the LSHTM ethics board (reference: 28053). Local permission was granted from the Kambia District Medical Officer and from local traditional authorities. International guidelines for conducting research on VAW were drawn upon throughout the study, including the WHO and PATH guidelines (Ellsberg and Heise, 2005; WHO, 2016b). A distress protocol was adapted from Draucker et al. (2009) to assist with referring participants to counselling services as appropriate and when needed. All identifiable information was removed during transcribing and drafting of field notes. In order to protect researcher and participant safety, a script was used to help answer questions about the research posed by family or community members such that VAW was not communicated as the primary focus. Written consent was given by all participants (or in the case of illiterate participants a witnessed thumb print) after being provided with study information and time to ask questions.

Findings

Our findings are organised around four main themes (Table 2). In the first section, we provide background on the very limited service provision for VAW in both settings, how participants described the outbreaks, and how they affected health services that survivors of VAW utilised. We then discuss how systems of care were reconfigured during the outbreaks including the heightened role of community, customary, and informal providers of care to VAW survivors. Adaptations that VAW providers tried to make to health service delivery are then described, as well as how they found motivation to persist in delivering care. Finally we present the range of risks and challenges to VAW health service delivery and utilisation in both settings during the outbreaks.

Health services for VAW during 'normal' and outbreak periods

Participants described an interconnected network of both formal and informal/community-based services which women might use after facing violence as well as for other health and justice needs, regardless of whether there was an outbreak or not. In both study communities, people described a background of chronic stress within the health system during non-outbreak periods. When they did manage to use government support structures, women often encountered under-resourced, broken, or corrupt health (and legal) systems. Participants described absenteeism, and informal co-payments that women (as well as other patients) might need to pay when using government health services following violence:

Many times, the doctor has told us that we should pay, even assault

between misses and master [wife and husband] you should pay and it is one hundred and fifty thousand (~$7.50USD) because that money is used to pay the auxiliary staff who are not salaried. (VAW health service provider, Kambia)

Informal and customary justice providers such as 'sababus' (informal mediators) and chiefs, as well as informal health providers like unlicensed drug vendors and traditional healers, were mentioned as the first point of contact for a range of health and justice concerns for women, including for violence. This was especially striking given research assistants did not explicitly ask about support from these providers. On many occasions, the health care that women used after facing violence was extremely limited, with many participants reporting self-medicating with painkillers after being beaten by their husbands. Medicine sellers were known to provide emergency contraception and first aid, as well as opioid pain relief, with certain individuals known to provide medical abortion, or certain traditional healers provide herbal abortion as well as 'spells' for marital disputes (for example disputes connected to IPV). 'Sababu' is a general term in Sierra Leone for an influential person or patron, in this case 'sababus' were often people in the community who oversaw marriages and marriage disputes (given that IPV was often perceived as a marriage dispute), and they ranged from someone who was a neighbour to authority figures like Imams. These local actors can intervene, and they often aim to keep a marriage intact, whether or not this is in a survivor's best interest. This is referred to as 'settlement'. For violence perceived as 'less serious' according to local norms around violence, such as IPV, survivors were more likely to use informal services given that these services were easier to access. For violence seen as 'more serious', such as rape by a stranger, they were more likely to access formal services, which were quite limited in terms of provision in both sites (see Fig. 1).

During both outbreaks, but especially Ebola, providers and communities noticed a surge in various types of VAW, especially IPV given that men were out of work and idle. Whilst fear of infection within health structures deterred survivors from accessing services, the NGO run VAW clinic saw periods with increased numbers of survivors presenting:

People were imagining that no survivors would come to the centre. But more cases were coming. It is because people [perpetrators] were less busy, they were just in the same area, they were not doing anything… I think more people were coming during Ebola than COVID, that is what I was experiencing. (NGO clinic staff)

Discussions of VAW health service use with providers and community members were contextualised within their broader experiences of poor service provision for all types of health concerns from government services during these periods. During Ebola, many areas of health service provision stopped or were disrupted:

During the time of Ebola, we never had trained and qualified nurses. That meant a lot of our people died here. Because the time that Ebola broke out, the health facilities were very poor. (Community member, Kambia)

Many participants described absenteeism, when women tried to get treatment and care after facing violence, government facilities were empty of health workers who either took up posts in the Ebola response or fled fearing infection, and the drugs the women needed were out of stock.

When Ebola broke out a lot of medical staff went to seek employment to other organisations because they believed that those organisations were paying high salaries. So, the hospitals were at some points left empty. And there was a repeat also during corona but it was a bit better because corona did not have organisations that created employment. (VAW key informant, Kambia)

Participants recruited in Kambia were women who had mostly sought care from community-based informal providers, who self-treated at home, or tried to use government clinics. Freetown VAW survivors differed significantly in their experiences with service quality as they were recruited from an NGO clinic that remained operational during the outbreaks. The following survivor who sought care during Ebola describes her positive experiences with services:

I was counselled well, and was given food and transport…due to the counselling I stopped thinking of killing myself, and it gave me hope again, because I was mentally unstable. After the counselling I knew I was not at fault. (Woman survivor of VAW, Freetown)

These survivors often recalled being provided with free services such as post-exposure prophylaxis, STI testing and accessing supportive counselling.

Unlike Ebola, the COVID-19 pandemic did not attract the same international attention and associated employment opportunities for health workers. COVID-19 was experienced through memories of Ebola in Sierra Leone, with initial fears that it would cause similar devastation. Most participants emphasised that it was far less deadly and caused less social and economic disruption than Ebola, however supply issues still affected provision of health care in some settings.

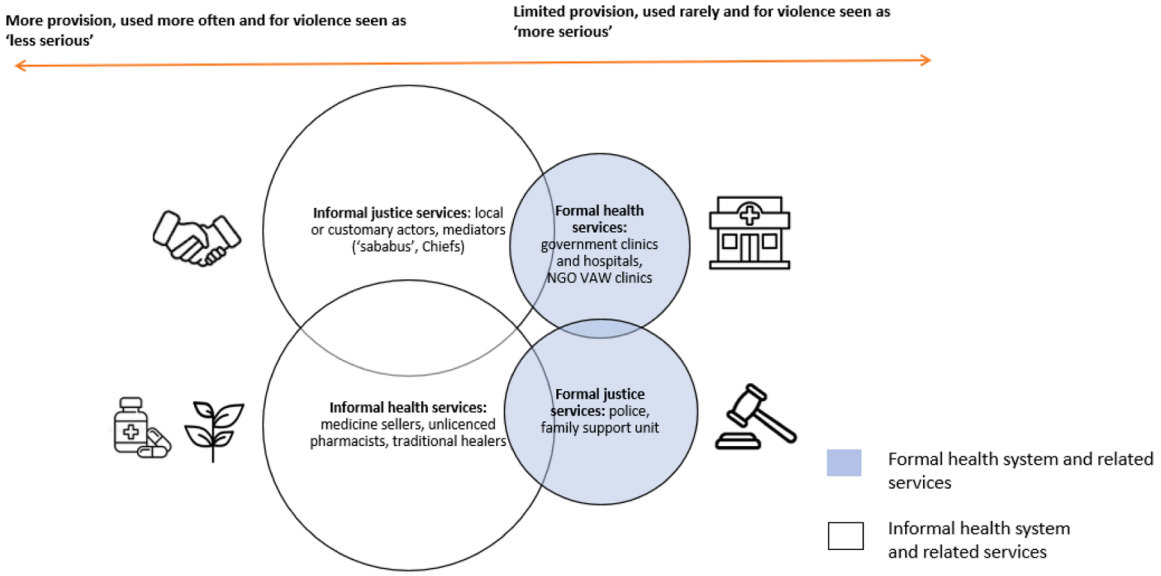

Fig. 1. VAW service provision in Sierra Leone (formal, informal, health and justice).

The role of informal providers during the outbreaks

The outbreaks, especially Ebola, but to a lesser extent COVID-19, were a period where informal and formal components of the health system were renegotiated and operated differently. Especially during Ebola, formal health structures were avoided and help-seeking became more localised. Participants described the risk and fear of either being infected with the virus or having symptoms mistaken for having the virus and referred to an Ebola treatment centre. Instead, they turned to informal health, but also justice providers. This included customary justice actors like 'sababus' and chiefs, and if survivors had physical injuries, stress or sexual and reproductive health concerns they might use unlicensed medicine sellers or traditional healers. As such, informal providers' role as first responders for illness and violence was amplified. For example, where they would previously use a clinic, during the outbreaks women might access a roadside 'medicine seller':

> *They were afraid if they come with her to the hospital they come and spray chlorine on her and they will have to isolate her…so the medicine sellers have become the hospital now. People believe in them. Instead of them coming to the main hospital they prefer to buy medicines, so in fact that has been in the hearts of the people before the emergency and it is still continuing, after Ebola the situation still continued especially for communities that don't have health facilities. (VAW key informant, Kambia)*

Justice responses to VAW also became more localised. For example during Ebola, by-laws were established to manage perpetration of VAW in many communities. A village in Kambia set up a 'taskforce':

> *Because we have seen that there are fights always among the woman and men whereby men always take advantage of the women. So, we established this team so that any man that beats or rape a woman, we will levy huge fine to the perpetrator…of fifty thousand Leones (~2.5 USD). (Community member, Kambia)*

Informal providers also seemed to work alongside or even 'plug' gaps in the formal health and justice service delivery systems, especially as health seeking became more localised. For example, some described traditional healers referring survivors to formal health services (if they saw symptoms as outside the scope of their practice) and informal pharmacies buffering drug stock-outs at hospital pharmacies.

At the same time, many community-based and informal actors claimed they had a reduced scope of responsibilities during the outbreaks and following the high profile justice reforms. 'Settlement', or mediating a case of violence in the community, was banned following the 2012 gender justice laws such that most providers expressed wariness of rendering help following a rape (this was however not the case following physical violence). These actors also felt under equipped to treat many patients during the outbreaks, as this unlicensed medicine seller claims after being infected by a patient with Ebola:

> *So, that is why Ebola has taught me a lesson that whatever sickness that I cannot do test on you should not compromise it, as soon as it has gone beyond your capacity you should refer it to the hospital…I normally do referrals because I know what previous outbreaks had done to me. (Medicine seller, Freetown)*

Furthermore, many informal providers including traditional healers and medicine sellers were banned from operating during Ebola as they were blamed for cases spreading. Our findings revealed a complex picture of which providers were operating, closed down, or were banned during Ebola. Despite restrictions, many informal providers continued to operate in clandestine to generate an income. This informalisation of care was more prominent during Ebola due to widespread fear and a shutdown of formal services. Whilst the NGO setting that we examined may have seen an increase in survivors seeking services,the service delivery landscape was reconfigured, and survivors preferred to receive care from informal providers if they did seek help for violence.

Adaptations and endurance by providers delivering health services for VAW during the outbreaks

Some healthcare provider accounts showed adaptive work that was carried out during both outbreaks. This was usually limited to infection prevention and control (IPC) measures taken during their daily work, linked to fears of infection, as described by the following health worker during Ebola:

> *So, they trained the health staff on how to prevent themselves using the universal precautions like wearing of face mask and also the wearing of PPE, hand washing… (Health worker, Kambia)*

Adaptations were perhaps more feasible at the NGO clinic where clinic staff members changed roles and took on new responsibilities. The administrative staff member below was tasked with screening incoming VAW survivors for Ebola:

> *Yes, like the cleaner was assigned as the security and…for the incoming visitors at the centre the office assistant was alert and constantly at the door of the office: whenever somebody is coming she would take the temperature, take you through the triage questions. (VAW health service provider Kambia)*

Providers also described taking individual responsibility to make systems 'work'. An NGO provider of VAW health services described how their team endured without salaries for three months and walked long distances to work, avoiding motorbike taxis due to the risk of infection during Ebola. In the context of such high personal sacrifices, providers reported being motivated by a sense of duty and morality to help women during the crisis: *"we continued our work for the women in Sierra Leone so we continued pushing and we accepted and continued work until they start to pay us again, just small money by then."*

During COVID-19, lessons from Ebola shaped both IPC responses and community expectations:

> *…during Ebola I was just doing things just like normal times, for Ebola everyone was overlooking the disease and by the time everyone was aware a lot of people were dead, but Corona we listen to advice. (Traditional healer, Freetown)*

Despite their motivation, providers' delivery of treatment and care was hindered by the difficult environment they worked in during these periods.

Risks and challenges in delivering health services for VAW during the outbreaks

Providers faced enormous challenges in attending work during Ebola. Many described fear and an atmosphere of chaos inside hospitals and health centres where protocols and systems fell apart, drugs like emergency contraception and reagents were stocked out, and health professionals had to risk infection in order to deliver VAW services:

> *I was thinking that I risked my life, my first mistake would have been my last…So, I was thinking of staying home and not risking my life but again how would my family survive? I would have done that differently, sometimes we had to jump over dead bodies in order to access our clinic, our clinic was at the extreme edge of the hospital… when the nurses are afraid to treat them, they just die outside the hospital. (VAW health service provider)*

This also served as a major point of difference in participants' memories of the outbreaks. Considering the high mortality in Sierra Leone, Ebola was consistently remembered as a more terrifying and

deadly experience than COVID-19, shaped by 'life and death' encounters. Informal actors felt especially under equipped to manage VAW survivors during outbreaks due to the risk of infection. Traditional healers described what they needed during future outbreaks in order to deliver services to survivors of violence, including personal protective equipment (gloves, boots, hand sanitiser, masks) and an ID card, suggesting a desire for formal accreditation (see Fig. 2).

Formal health workers faced a range of other challenges. NGO services faced funding restrictions as the influx of foreign support for Ebola was often siloed and seemed to occur at the expense of other health care priorities:

> *Our greatest challenge at the centre then because donors were afraid to come due to the outbreak of Ebola, everything was centred around Ebola survivors so other organisations restricted on their funding. (VAW key informant)*

Discussions with providers also revealed ways that their operations were overlooked by the outbreak responses, with no guidance available on how these services could remain operational. VAW was an invisible concern by actors working within the international Ebola response:

> *It was just neglect…Yeah, like you said these are not issues and what the issue is 'let us end Ebola'. (Outbreak actor, Freetown)*

Despite the risk of infection that they faced, especially during Ebola, providers were often underequipped to manage survivors, and the continuation of VAW treatment and care was not prioritised as the international response played out.

Discussion

We examined experiences with health system responses for VAW during recent outbreaks in Sierra Leone. We found that inadequate and poor service delivery for VAW was a common concern for women regardless of whether there was an outbreak or not. However, during the Ebola and COVID-19 outbreak periods, and especially during Ebola, chronic deficiencies worsened. Given the fear of being infected within health care settings, women tended to turn towards informal providers after facing violence for treatment of minor injuries, SRH concerns, or mediation with a violent partner. This included informal justice providers ('sababus') and chiefs, as well as informal health actors like unlicensed medicine sellers and traditional healers. This led to a reconfiguration of VAW actors and health service delivery systems which differed significantly between outbreaks, with Ebola remembered as more deadly and with more serious impacts on services and service access than COVID-19. This also differed between study settings with better quality treatment and care provision at the Freetown NGO setting compared to scarce provision in Kambia. Providers (both formal and informal) reported risks of infection coming to work, and many took individual responsibility to make service delivery systems work. This paper is one of few studies to examine experiences with health system responses specifically for VAW during recent outbreaks in a sub-Saharan African setting, and the first we are aware of from Sierra Leone (John et al., 2023; Yirgu et al., 2023).

The ability of outbreaks to overwhelm health systems and disrupt routine health service delivery is well known and has been described in Sierra Leone (Jones et al., 2016) and other settings globally (John et al., 2023; Yirgu et al., 2023). Our findings revealed that in Sierra Leone, COVID-19 was largely experienced through memories of Ebola, it did not have the case fatality rate or cause comparable devastation to the health system as Ebola. Recent literature shows the adaptations carried out by health workers during COVID-19, for example taking on new roles, peer education, and creation of common protocols between facilities (Knutsen Glette et al., 2023). In Sierra Leone, based on lessons from Ebola, there were efforts by the health system to work with informal actors. Health workers began collaborating with traditional healers as well as community health workers to improve surveillance and encourage people to present at facilities during the pandemic (James et al., 2023). Our findings showed that some IPC adaptations took place during the outbreaks, and we saw that everyday work was carried out to repair 'broken' health systems structures, with patients, their families, health workers or others taking responsibility for 'making the system work'. This is illustrated by other research in Freetown, showing how supply outages resulted in lab technicians buying their own reagents and charging patients informal payments to recoup the costs (Lee et al., 2022; Vernooij, 2021; Vernooij et al., 2022). Informal payments and absenteeism inside care delivery settings may be exposed more during outbreaks, our findings also accord with research showing the sacrifices, de/motivation, and under-reward many health workers felt during Ebola, as well as their motivations to continue supporting patients, and their moral imperatives (Park, 2017). Given the sacrifices and risks they take in delivering care during outbreaks, there have been calls for better support for frontline workers in order to strengthen essential health service delivery (Mahlangu et al., 2023). For example, support for personal protective equipment, comprehensive mental health support, and infection prevention and control.

Our findings also fit with documented frustrations experienced by patients trying to use the Sierra Leone health system and other public services (whether during outbreaks or non-outbreaks) as well as maladaptive strategies such as informal payments used by providers (Ogbozor et al., 2023). Elsewhere it has been found that 50 % of Sierra Leoneans who use public clinics and health centres, and 64 % who sought police services in the last 12 months reported paying a bribe (Letouzé et al., 2022). Amongst others, these factors proved to be important access barriers for VAW survivors.

There is also very little research on how informal or unlicenced health actors support survivors of violence. Ebola prompted a renegotiation of local authority structures across Sierra Leone, leading to changes in some actors' roles, and following Ebola there was a recognition that the outbreak response had ignored important

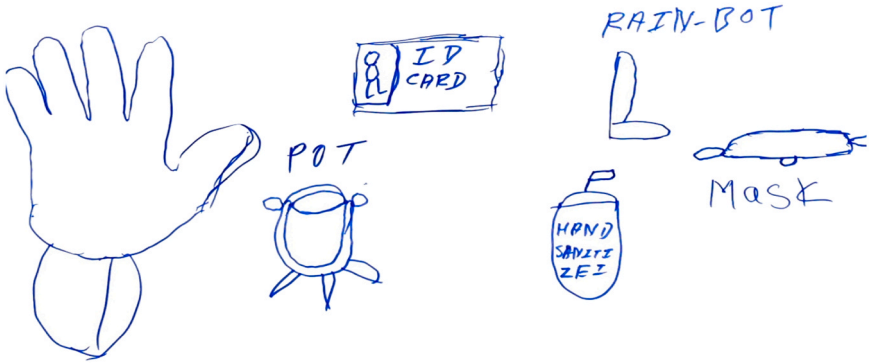

Fig. 2. Mapping by traditional healers of what is needed to continue delivery of VAW services to women survivors during future outbreaks.

community dynamics (Martineau, 2016; Mayhew et al., 2021). Although neglected in health systems research, informal actors like medicine sellers are often preferred for advice on health concerns in many African settings during non-outbreak times because of their affordability and accessibility (including for medical abortion, emergency contraception and first aid for example) (Akinyemi et al., 2022; Konde-Lule et al., 2010; Sudhinaraset et al., 2013). In other African settings women were more likely to use medicine sellers during outbreaks like COVID-19 for sexual and reproductive health (Adelekan et al., 2024). While there is some literature on informal actors and VAW *prevention* interventions through their role in community-level norm--change (Abramsky et al., 2016), there is very little known about their role in treating survivors of VAW. Some work from Sierra Leone shows that after the civil war women and girl survivors of sexual violence were most likely to seek out traditional medicine (such as herbs and leaves) shortly after an assault, usually to treat physical injuries, with other healing practices following (Utas, 2009). Other research shows it is common for these providers to undertake poor practices (e.g. selling degraded drugs or over/under dosing of prescription only medicines) (Akinyemi et al., 2022; Hutchinson et al., 2023, 2015a). Indeed, there were concerns about transmission in many of the informal services we studied during the outbreaks and hence they were banned from operating. There are also very real risks to survivors from customary justice and mediation processes (e.g. counsels of elders) in African settings (Cohen et al., 2024; Horn et al., 2016). As we saw in Sierra Leone, the goal of traditional dispute forums can be to keep a marriage intact and keep a family together, they are often dominated by men and uphold practices that discriminate against women or protect perpetrators (Cohen et al., 2024; Horn et al., 2016).

Our findings do not suggest that informal providers offer quality or survivor-centred services. However, we have highlighted that their community ties present an opportunity to enhance health responses, particularly during crises when their role is amplified. This paper highlights the need to understand informality within African health systems, connections between different actors, and how actors who are well linked to the community can be better leveraged during outbreaks. Policy-makers should consider developing simple training and clear referral pathways to enable informal providers to identify and safely refer survivors to appropriate care, particularly where formal services are scarce. Pilots and evaluations are needed of VAW service delivery responses that can upskill and integrate these actors into VAW interventions to enable them to triage and refer survivors.

In Sierra Leone, outbreak interventions have seen customary actors as a stop gap until formal sources of authority can assume control (Beoku-Betts and M'Cormack-Hale, 2021). This has led to missed opportunities to enable greater community ownership over outbreak responses (as highlighted in the Ebola literature) (Audet et al., 2024; Benton, 2017). In terms of implications for strengthening health system responses to VAW during crises, our findings support other health system research that underlines the need to understand health systems as a web of relationships beyond just formal care settings, including both individuals and community institutions (Mayhew et al., 2021). Our findings resonate with the literature on entanglement between formal and informal actors within health systems, including during outbreaks (Enria, 2020; Hutchinson et al.,2015b). Concepts of health system resilience should be expanded to include informal actors, such as medicine sellers and traditional healers, who played a front-line role in engaging with communities and service delivery when formal services were disrupted. This echoes other research from the aftermath of Ebola in West Africa that described multiple, entangled 'systems of care' and the key role played by informal actors at the level of families, towns/chiefdoms, and districts, who were largely sidelined during the Ebola response (Mayhew et al., 2021). We need to understand not only how formal health actors respond, but also how other informal (including traditional) community-based organisations or institutions adapt to crises in order to improve outbreak responses.

Our understanding of service delivery during the outbreaks may be distorted by the fact that many of the informal services we studied were banned and, as such, participants may have been reluctant to describe either using or providing these services. We can assume that these services were more active than acknowledged during the interviews. Given the small VAW service delivery landscape and the fact that many staff were new and had not worked during the outbreaks, we were only able to recruit a limited range of VAW service providers. Our data speaks to the experiences of informal providers, an NGO service delivery setting, and a setting with limited formal services. Whilst we tried to capture a range of perspectives within these settings, our findings may not reflect the full range of health service delivery settings across Sierra Leone where survivors may present. The length of time since the COVID-19 and especially Ebola outbreaks meant that participants may have also struggled to recall events from these periods.

The strength of this study was that through local networks, the assistance of interlocutors, and the EBOVAC3 and Rainbo Initiative network, we were able to contextualise findings and also to recruit service providers who are often hidden for the purposes of research, such as unlicenced medicine sellers and traditional healers, many of whom operate in clandestine. Gathering their experiences was essential for creating a nuanced picture of local health systems and service delivery for VAW.

Conclusions

We found that recent outbreaks in Sierra Leone, especially Ebola, worsened 'normal' challenges with health service delivery for women seeking care after experiencing violence. Informal providers such as local mediators and medicine seller who are embedded in community networks had a heightened role responding to women's needs during the outbreaks. However, both formal and informal providers faced stress, they risked infection treating women, however many persisted in trying to make broken systems work. Findings speak to the importance of strengthening health system responses to VAW, especially during outbreaks which are known to trigger increases in violence and put stress on the delivery of health services for non-outbreak concerns. Our findings also point to future opportunities to incorporate informal actors into outbreak responses in settings like Sierra Leone.

CRediT authorship contribution statement

Rose Burns: Writing – review & editing, Writing – original draft, Supervision, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Janet Seeley:** Writing – review & editing, Supervision, Methodology, Conceptualization. **Maseray Fofanah:** Investigation, Formal analysis, Data curation. **Tehsie Momoh:** Investigation, Formal analysis, Data curation. **Shelley Lees:** Funding acquisition, Conceptualization. **Neha Singh:** Writing – review & editing, Supervision, Methodology, Conceptualization. **Manuela Colombini:** Writing – review & editing, Supervision, Methodology, Conceptualization.

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Declaration of Competing Interest

The authors declare that they have no known competing financial

interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.ssmhs.2025.100102.

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