ORIGINAL RESEARCH ARTICLE

Health system barriers affecting the provision of comprehensive abortion care in pastoralist communities of Oromia Regional State, Ethiopia

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Abstract

This study aimed to explore health system-level barriers affecting the provision of comprehensive abortion care (CAC) in pastoralist communities of Oromia regional state, Ethiopia. A total of 23 key informant interviews were conducted with healthcare providers at 14 selected health facilities, as well as with reproductive health officers at the woreda, zonal, and regional levels. Verbatim transcripts were analyzed using thematic analysis with Open Code 4.03 software. The findings were thoroughly described and supported with direct quotes. Various systemic issues affecting abortion service delivery, including gaps in access and availability, shortage of skilled medical providers, financial constraints, poor management commitment, and gaps in legal framework implementation, were identified. Addressing these issues requires a multifaceted approach that involves improving infrastructure, enhancing provider training, increasing community education, implementing policies effectively, and conducting advocacy efforts at all levels. *(Afr J Reprod Health 2025; 29 [9s]: 46-59).*

Keywords: CAC, Health system-level barriers, Pastoralist communities, Ethiopia

Résumé

Cette étude visait à explorer les obstacles au niveau du système de santé qui entravent la prestation de soins complets d'avortement (SCA) dans les communautés pastorales de l'État régional d'Oromia, en Éthiopie. Au total, 23 entretiens avec des informateurs clés ont été menés auprès de prestataires de soins de santé dans 14 établissements de santé sélectionnés, ainsi qu'au niveau des woredas, des zones et des régions. Les transcriptions ont été analysées par analyse thématique avec le logiciel Open Code 4.03. Les résultats ont été décrits en détail et étayés par des citations. Divers problèmes systémiques affectant la prestation de services d'avortement, notamment les lacunes en matière d'accès et de disponibilité, la pénurie de prestataires médicaux qualifiés, les contraintes financières, le manque d'engagement de la direction et les lacunes dans la mise en œuvre du cadre juridique, ont été identifiés. La résolution de ces problèmes nécessite une approche multidimensionnelle impliquant l'amélioration des infrastructures, le renforcement de la formation des prestataires, l'éducation communautaire, la mise en œuvre efficace des politiques et la conduite d'actions de plaidoyer à tous les niveaux. *(Afr J Reprod Health 2025; 29 [9s]: 46-59).*

Mots-clés: SCA, obstacles au niveau du système de santé, communautés pastorales, Éthiopie

Introduction

Comprehensive abortion care (CAC) is a full spectrum of services aimed at managing abortion-related complications, to provide timely and appropriate management of both safe and post abortion care for all women.[1] CAC constitutes both safe and post abortion care services.[1,2] Along with the coverage and expansion of CAC, the provision of this service based on legal frameworks, policies and clinical standards is equally important.[3, 4] Abortion was legalized in Ethiopia in 2005 under specific conditions: in cases of rape, incest, maternal problems and problems relating to fetal impairment.[5] Nevertheless, disparities in access to quality comprehensive abortion services persist,

particularly in pastoralist communities. Limited healthcare infrastructure, challenging geographic and socio-cultural contexts, and socioeconomic disadvantages often characterize pastoralist communities.[6-10] These features contribute to the complex and multifaceted challenges to access to comprehensive abortion services.

The specific challenges in pastoralist communities include limited healthcare infrastructure, geographical barriers, financial constraints, limited awareness and knowledge, and sociocultural factors, which contribute to the persistence of inadequate access to CAC services.[6,8,9] In addition, the scarcity of healthcare facilities capable of providing quality CAC in pastoralist areas could worsen the difficulties faced by women seeking these services. Limited availability of trained healthcare providers and necessary equipment in these areas can further impede access to safe abortion services.[11-13] And most of these factors are related to the healthcare system.

The existing disparities and challenges in terms of the provision of quality, comprehensive abortion services in pastoralist communities have serious implications for women's reproductive health and rights. Thus, addressing these challenges requires a thorough understanding of the systemic level barriers that affect the provision of the service, necessary to design evidence-based interventions that consider the interdependent factors and challenges specifically in the pastoralist community. However, there is limited research on the health system-level barriers that affect the provision of CAC services in pastoralist communities.

Therefore, researching health system-level barriers that affect the provision of CAC services is crucial for informed policy interventions and identifying potential strategies to improve the delivery of equitable and accessible reproductive healthcare services in these underserved communities. This study aims to explore health system-level barriers that affect the provision of CAC in pastoralist communities of Oromia regional state, Ethiopia.

Methods

Study design and setting

A qualitative study approach was applied to explore health system-level barriers that affect the provision of CAC in the pastoralist communities who lead pastoralist or semi-pastoralist lifestyles residing in the Borena and Guji zones of Oromia Region of Ethiopia. The study included the regional health bureau, zonal health departments, woreda health office, and health facilities that provide CAC within the selected pastoralist communities. In the pastoralist communities of Borena and Guji zones, the number of health centers is 59, and 5 hospitals, respectively. Key informant interviews were conducted with healthcare providers and reproductive health officers at the woreda, zonal, and regional levels to collect data. The research was conducted from March 01 to June 30, 2024.

Study participants

The study participants for this study were healthcare providers at the health facilities, both health centers and hospitals, involved in the provision of CAC, as well as reproductive health or RMNCH officers at woreda, zonal, and regional levels. Healthcare providers and reproductive health officers (MCH heads) at the woreda, zonal, and regional level who could provide in-depth information about barriers and challenges related to the provision of CAC services were involved in this study.

Out of the total 14 selected health facilities, two were hospitals, one from the Borena zone and the other from the Guji zone. For the selected health centers and woredas, two key informant interviews were conducted, one at the facility level and the other at the woreda health office with the most information-rich participant. Overall, twenty-three key informants were interviewed for this study. The interviewees included midwifery professionals, maternal and child health heads at both facility and woreda levels, zonal MCH heads, as well as the regional MCH head and reproductive health officer.

Table 1: Socio-demographic information of the key informants for health system barriers affecting the provision of CAC in pastoralist communities of Oromia Regional State, Ethiopia, 2024

No.	Variables	Categories	Number	%
1	Age	<30	9	39
		30-45	10	44
		>45	4	17
2	Educational status	Certificate	2	8.7
		BSc	15	65
		Master's and above	6	26.3
3	Professional category	Midwifery	11	48
		Public Health/HO	9	39
		Nurse	2	8.7
		Medical Doctor	1	4.3
4	Position	Health Center	8	35
		Woreda Health Office	8	35
		Hospital	4	17
		Zonal Health Department	2	8.7
		Regional Health Bureau	1	4.3
5	Experience on CAC	Yes	20	87
		No	3	13
6	Training on CAC	Yes	15	65
		No	8	35

Fifteen of the participants are males. More than half have received training on abortion services and have experience providing CAC services (Table 1). The maximum variation purposive sampling technique was used to recruit study participants to include key differences in socio-demographic factors (educational status, position, and office/facility) to get rich information.

Data collection procedures

A key informant interview guide was prepared, considering the necessary elements that should be explored in light of the study's objectives. A combination of the WHO Health Systems Framework and Access to Healthcare Framework was used to guide the development of guiding questions for the study. WHO's Health Systems Framework would help to assess institutional and structural barriers within the healthcare system (Service delivery, Health workforce, Health information systems, Medications and technologies, Financing and Leadership/governance)[14] while Access to Healthcare Framework enables a detailed assessment of how each aspect of access (Availability, Accessibility, Affordability and Acceptability)[15] can affect abortion care provision, especially in remote settings where healthcare infrastructure is limited. Data collection was conducted by researchers with two research assistants. Before the qualitative data collection, training was given to research assistants on the study objectives and interview guides. A tape recorder and field notes were used as the techniques of data collection.

Data analysis

Verbatim transcription was done for audio recordings. Transcript files were read thoroughly and then coded. An initial code book was developed based on reading and rereading of the transcript files. Then, data were analyzed using both inductive and deductive thematic analysis with Open Code 4.03 software. A combination of the WHO Health Systems Framework and Access to Healthcare Framework was used to provide a robust approach in the analysis of the health system barriers that affect the provision of CAC. Field notes that were taken during data collection were used to support the write-up of the findings. A thick description of the findings was carried out by supporting it with direct quotes from the interview data.

Trustworthiness/rigor

The interview guide was reviewed by the investigators and pre-tested to ensure contextual appropriateness and relevance. Audio recordings were transcribed verbatim and translated into English from the local language. The credibility of the results was maintained by peer debriefing and prolonged field engagement. To ensure reliability, an audit test of audio recordings and transcripts was done, and a peer review was conducted. In terms of dependability, consistency was checked in the findings. A thick description of time, place, and context in the research process helps with the transferability of the study.

Ethical considerations

Ethical approval was obtained from the Institutional Review Board of Dilla University (Reference number ***duchm//irb/001/2024***), and a support letter was obtained from the Oromia Regional State Health Bureau. All participants were asked to give their verbal consent for participation after being fully informed about the risks, benefits, and procedures of the study and their right to withdraw from the study at any time. Confidentiality and privacy of participants were ensured throughout the research process. The author confirms that all methods were carried out in accordance with the Declaration of Helsinki.

Results

Health system-level barriers affecting the provision of CAC in pastoralist communities were qualitatively examined based on interviews conducted with key informants. The analysis aimed to identify key themes and codes related to health system barriers that affect the provision of CAC in the pastoralist communities. Various health system barriers, including gaps in access and availability, inadequate healthcare providers, financial constraints, management-related and systemic issues, the impact of initiatives, and unique characteristics of pastoralist communities, were identified. Direct quotes from the interviewees are included to explain these barriers.

Theme 1: Availability

Unavailability of the necessary instruments and medication for the provision of CAC services is the major concern in the pastoralist communities. These health system-level barriers that were associated with the availability of comprehensive abortion services, particularly in remote areas, include: unavailability of the service, lack of necessary instruments, and interruption in logistics and supply.

The service

Even though health centers are located at a distance of 30-40 km, abortion services are not available since the necessary instruments and medications are not available. The security problem in the Guji zone worsens the problem associated with the unavailability of the service. Health facilities are totally closed in the areas with serious security problems. As a result, the transportation facilities are interrupted. Unavailability of transportation poses significant challenges for the community in remote rural areas to come to the relatively stable area where health facilities are functioning.

"*From four health centers and two comprehensive health posts we have, CAC is available only at one health center*." (Woreda, MCH head)

"*There is nothing to say abortion service is available. There are no necessary facilities to say abortion service is available. We are cleaning only using gauze*." (Health Center, Midwifery)

"*If you take the forty-five health centers under the catchment of this hospital, they are not giving service due to the security problem. Due to the service interruption of those facilities, mothers may bleed for four or more days at home without medical treatment. When they come to us, there is a time when we provide blood transfusions for the mother*." (Hospital, Midwifery)

Necessary equipment

Some health facilities are physically available; however, they lack the necessary instruments and medications to provide CAC services. Necessary equipment for the provision of CAC services is totally unavailable in most of the facilities, partially

available in some, and not functional in the other facilities. Even if the equipment is available, it needs skilled professionals to operate it, whereas the workforce is unavailable at this level.

"…*We are cleaning only using gauze. All the necessary equipment to give the service is not available.*" (Health center, Health Officer)

"… *In some health facilities, even though there is adequate equipment like MVA to give CAC service, there is no skilled professional to operate it. This is because the professionals leave health facilities after taking training on CAC for another area.*" (Zonal Health Department, MCH head)

Supply

Even in the health facilities where the service is launched, interruptions in the logistic and supplies is raised as a crucial problem. The problem is worse at the rural health facilities of pastoralist communities, where the facility is not functional in this regard due to the lack of necessary items for the service. The provision of those materials and drugs is dependent on the partner organizations. When the programs of those partner organizations are phased out, the supply of that equipment is discontinued.

"*The provision of CAC services at the hospital is affected by the irregular supply of essential medications like misoprostol and inadequate equipment like MVA kits*." (Hospital, Midwifery)

"*Logistical issues such as the availability of necessary equipment, supplies, and medicines are more problematic at the rural health center level than at the hospital*." (Zonal Health Department, MCH head)

"*Since most health facilities, particularly rural health centers, are dependent on the supply from partner organizations, if those organizations are closed out, the supply will be interrupted. That has its own impact on the continuation of the service provision.*" (Zonal Health Department, MCH head)

Theme 2: Accessibility

The unique characteristics of the pastoralist communities and their structural development make them less accessible to health services. Inaccessibility of CAC services is leading to higher utilization of traditional practices and self-administered medications, which is contributing to the high prevalence of unsafe abortion. In the pastoralist communities, traditional practices are well known. This practice is worsened when it is an unsafe abortion due to legal restrictions on the service, stigma, and discrimination around the service. Many barriers related to the health system that affect the accessibility and provision of comprehensive abortion services were identified. These include inadequate transportation, location, and distance of health facilities, referral linkages, and the absence of the service at most of the rural health centers.

"*We cannot say the accessibility of the service is adequate because there are still many unsafe abortions. Lack of service accessibility in their area is leading to the use of traditional practices and self-administered medications as an alternative*" (Hospital, MCH Head)

Distance

At each woreda level, only one health center provides this service from the four health centers that are available within the woreda. Even though the facilities are available physically, maybe within the distance of 30-40 kilometers, they do not provide CAC at all. Health centers that provide this service are located a long distance from the residents of the community. Locations of health facilities are unclear in some areas without considering the residency of a large portion of the community. The problem of location and distance of those health facilities is worsened by the lack of transportation facilities and inadequate road networks.

"*Accessibility is a major concern with health centers located far from remote pastoralist settlements and lacking reliable transportation options*." (Regional Health Bureau, RH officer)

"*Mothers have to travel long distances to reach the hospital, often in critical condition requiring blood transfusions when they arrive at the facility*." (Health Center, MCH head)

"*The dispersed population of pastoralist communities makes it difficult to access services due to poor road network infrastructure. The health facilities are not strategically located. In some areas, it is not near the formal residency of the*

major part of the community..." (Woreda health office, MCH head)

Referral

The referral system within the pastoralist communities for CAC services is very poor. This problem is mainly related to the poor road networks as well as the unavailability of transportation services. As a result of a lack of transportation facilities, a bleeding mother should stay for a week to travel to the health facility after she has been in the critical stage.

"*Transportation service is challenging within the pastoralist community, especially for some kebeles, as the transportation reaches only on market days. Maybe it is only a motorbike that can be found. Experiencing abortion, due to transportation problems, they may wait for a week to go to health facilities.*" (Zonal Health Department, MCH head)

Impact of inaccessibility

Inaccessibility of CAC services is leading to higher utilization of traditional practices and self-administered medications, which is contributing to the high prevalence of unsafe abortion. In the pastoralist communities, traditional practices are well known. This practice is worsened when it is an unsafe abortion due to legal restrictions on the service, stigma, and discrimination around the service.

"*We cannot say the accessibility of the service is adequate because there are still many unsafe abortions. Lack of service accessibility in their area is leading to the use of traditional practices and self-administered medications as an alternative*" (MCH Head of Yabello Hospital)

"*There are many cultural and social factors that discourage utilization of the modern health services in pastoralist communities in general. On top of service inaccessibility, the strong stigma around abortion can lead to a tendency to use traditional practices in rural areas,*"(RH officer of Oromia Regional State Health Bureau)

Theme 3: Service area

The way service area and conditions are arranged is one of the major health system barriers identified affecting the provision of CAC services. It includes: a lack of separate spaces for CAC and integration with other maternal health services.

Spaces

In the pastoralist communities, there is a significant lack of dedicated spaces for CAC. Even the hospitals and other facilities expected to give CAC service have no separate room for the service. Lack of a dedicated room for this service can influence the personal privacy of the users, which is highly demanded, specifically in the case of abortion services. This, in turn, leads to a loss of interest in using public health facilities and a preference to go for private facilities and traditional practices. Additionally, a lack of separate spaces can result in environmental overcrowding and affect the counseling service they should receive.

"*… There is no separate room for providing the service. This leads to a lack of privacy and confidentiality for clients seeking an abortion service, which often forces them to use unsafe methods or private facilities in town areas*." (Health center, Midwifery)

"*Many women are opting for traditional or private providers over public facilities due to the fear of their privacy and stigma from the community as a result. If you take urban residents, they can afford to use private facilities for their privacy, or if they want, they can go to Chiressa (traditional healers). But the rural communities have only one option; that is, visiting Chiressa.*"(Zonal Health Department, MCH head)

Integration

Lack of a separate room for this service is leading to integration with other services, which can compromise the interest and preference of the service users for safety, privacy, and confidentiality. In the case of abortion, the need for privacy is higher. This condition results in work overloads on the healthcare providers, on top of affecting the privacy and dignity of users.

"*The provision of CAC is poor due to the integration with other maternal health services, resulting in providers being overburdened and unable to provide adequate counseling and care.*" (Hospital, MCH head)

"*This service is given within the delivery ward. This leads to a lack of privacy and confidentiality for clients seeking abortion services.*" (Hospital, Midwifery)

Theme 4: Health workforce

The provision of CAC services is often inadequate due to an inadequate number of health care providers, insufficient training, and the lack of dedicated professionals. Hence, under this theme, the following categories were identified, which include: inadequate number and competency of health care providers, high professional turnover, health professionals' attitude and belief toward the service.

Number and competency

Overall, in the pastoralist communities, the number of health professionals does not match. Insufficient number of trained professionals, mostly up to only one person trained on abortion per woreda/facility. When he/she leaves for the break or for the training, the service will be stopped. Those trained professionals are overburdened with other health services while also being expected to provide CAC services. This can result in exhaustion and burnout among professionals, which can directly affect the quality of the service they provide.

"*The health professional is maybe expected to give abortion service at the same time he/she is busy with following another mother during delivery. So, it is difficult to say the service is given with good quality. The number of existing health professionals is not adequate. I don't think it is adequate to cover all the wards and services with the existing human power*." (Hospital, MCH Head)

"*The provision of abortion services is often inadequate due to an inadequate number of healthcare providers, insufficient training, and the lack of dedicated professionals...*" (Woreda health office, MCH head)

Attitude and belief

Healthcare providers' attitudes and beliefs regarding CAC are not similar, as some consider it an evil and illegal act. That negative attitude from some health professionals has a significant impact on the motivation of those healthcare professionals who are involved in the provision of the service, as well as on the emotional state of the service users. This condition will be worsened in the pastoralist where the community's judgment toward the service is serious, which can shape the professionals' attitude and beliefs in reverse.

"*The professionals also neglect this service. They prefer not to give this service. They think that abortion is like killing a baby. Some health professionals believe the same way the community members believe about abortion services.*" (Health center, Midwifery)

Staff turnover

There is high staff turnover in the pastoralist communities. Most health professionals leave the area within the first one or two months after they are recruited. They leave the area most of the time after taking the training on CAC services, which results in interruption of the service provision. There is a high budget constraint to provide regular training for health professionals on this service. So, staff turnover is one of the major factors leading to an inadequate number of health professionals, which then affects the service provision.

"*The first one is after getting the training on this service, there is high turnover in the pastoralist communities. To substitute in place of that person who resigned from the position, it needs training, which is not easy. …Staff turnover further lowers the inadequate number of professionals from the beginning issue. Most of the professionals from the highland of the country leave our area for the preference of the climate conditions*" (Zonal Health department, MCH head)

Theme 5: Health system management

Commitment of health system management, culture of data management, feedback mechanisms, and policy and legal framework around abortion are health system management-related barriers that were identified to affect the provision of CAC service in pastoralist communities.

Commitment

Weak commitment from the management body and lack of emphasis on abortion services are among the

major health system-level barriers that affect the provision of CAC services in the pastoralist communities. Even though CAC is a major health problem in the pastoralist communities, it is not emphasized by the health system to the desired level.

"The problem is wide. In the community, the abortion cases are highly prevalent. The management's commitment and support in terms of funding, human resources, and supplies are limited." (Hospital, MCH head)

"*It is difficult for me to say there is support from the management bodies. I think there is no emphasis from them at all. There is nothing.*" (Health center, MCH head)

Data management

This study in pastoralist communities reveals that a major barrier within the health system is poor data recording, analysis, and use for proper decision-making, from the facility level up to the zonal and regional levels on CAC services. Most decisions and strategies at the national level are tailored more toward agrarian and urban communities than toward pastoralist communities.

"*In this process, there are gaps, there is adequate awareness of carefully registering data, and most of the time, there is inconsistency in data. There is sometimes an inconsistency when you cross-check the tally sheet and the registry book. There is also a gap in using data for decision-making regarding CAC service, as well as in general. Particularly for the pastoralist, this problem is greater. Even the national policies are mostly designed for agrarian and urban communities.*" (Zonal Health Department, MCH head)

Feedback

Feedback mechanisms are not well established to receive feedback from the service users for appropriate responses. This is a major concern for the sensitive cases like CAC, where the users have many concerns regarding their privacy, safety, and psychological feelings. Lack of specific feedback mechanisms for abortion services leads to poor service provision.

"*There is no specific feedback mechanism for abortion services. Maybe there is a record book for feedback collection. The problem is that it starts sometimes and is then paused for no reason.*" (Hospital, MCH head)

"*Even though the CAC services demand a specific feedback mechanism, I think no one is concerned about receiving feedback from their clients. I am not sure if there is any feedback mechanism at all.*" (Woreda Health Office, MCH head)

Legal framework

The policy and legal framework regarding abortion service provision is supportive based on identified legal conditions. However, the implementation according to those legal frameworks is impaired, specifically at the private health facilities. There is no adequate understanding among the community on this matter. As a result, there is a high tendency to utilize traditional practices and self-medication rather than utilize public health facilities. Finally, those who are involved in traditional practices and self-administered medications develop life-threatening complications and finally go to public facilities.

"*…there is no problem with the legal framework of the service. It clearly states when the service is possible and when it is not. … The problem is with the implementation of those legal frameworks, specifically in the private facilities. There are social and cultural factors, and religious issues.*" (Regional Health Bureau, RH officer)

Theme 6: Financing

Costs associated with abortion services range from direct costs for the service to costs to establish the service fully and on a broad scale for the community in their vicinity. At some hospitals or facilities, the service users are obliged to pay for procedures and buy some medicines from external pharmacies. The financial limitations faced by health facilities can be explained, including the lack of funding for training healthcare providers and fulfilling necessary facilities for the provision of abortion services.

For capacity building

There was no regular training program for the capacity building of healthcare providers on CAC

service provision. Inability to conduct thorough and regular training for healthcare providers is due to challenges in the budget and financial constraints. There is no adequate funding for equipping healthcare providers with training.

"…*But training health professionals is not a simple activity. It takes resources and time. So, you cannot do that continuously; most of the time, the training is supported by partners.*" (Regional Health Bureau, RH officer)

To fulfill the necessary facilities and supplies

And fulfilling necessary facilities for the provision of the service properly nearby for the users also needs a budget. Shortages in necessary instruments, including the lack of necessary medications and supplies, are often linked to financial barriers. To fulfill shortages in necessary instruments, organize separate rooms for the service and necessary facilities, and budget plays a crucial role. This will be a major issue in the pastoralist communities where there is a significant lack of adequate facilities and interruption in supply, which will depend on financing.

"*…One of the reasons for the unavailability of the necessary supply and separate space is due to a lack of sufficient funding for this service separately. Unless the budget and source of the budget are secured, it is difficult to say that this service will be improved to the quality and standard that it should be provided.*" (Zonal Health Department, MCH head)

Service charge

Costs associated with abortion services can be linked to the need for patients to buy medicines from external pharmacies and pay for procedures in some hospitals or facilities. Whether the service is free of charge or given with a service fee, there is no similar understanding and implementation among health facilities and health offices at different levels. While the management bodies explained that the service is free of any service charge, the health professionals at the health facilities explained that the users pay for the procedure as well as for the medications. Additionally, it was not included in the health insurance coverage. Cost and payment to get the service are pushing those who can't afford to utilize the alternative traditional practice. That can result in complications related to unsafe abortion, which endangers the life of the woman.

"*…abortion is not included within health insurance services. I don't know if this is true in general or only if it is limited to our hospital level. For example, if a mother gets an abortion, she cannot get the service with health insurance; she should pay in cash for the abortion service. Like other accidents, abortion is not included within health insurance. They pay for medication, gloves, and a cannula, and for every service they get regarding abortion. They pay for the admission and procedures.*" (Hospital, Midwifery)

"*This service is free at the government health facilities. To my knowledge, for any maternal health services, there is no payment at all, whether for medication, necessary items, or procedures; she doesn't pay. However, we haven't studied its implementation according to this protocol.*" (Zonal Health Department, MCH head)

"…*So, calculating all these payments, the clients may not come to the hospital. Then they go for the alternative traditional practices. Then, at the end, they will come back with additional complications.*" (MCH Head of Yabello Hospital)

Theme 7: Initiatives and programs

Collaboration with stakeholders through mentorship and training programs has shown positive results. However, these initiatives need to be continuous and sustainable to ensure long-term improvements. Under this theme, different categories like the Mentorship program, the mobile health team, and community awareness creation and information provision were identified.

Mentorship

There is a professional mentorship that is being implemented in the Borena zone in which the health professionals at the hospital level go down to the health centers level to share their experiences regarding health services. Healthcare providers working at the hospital level visit those at rural health centers to share their experience on how to perform CAC procedures and any updates regarding the major health services.

"*In collaboration with a partner organization, there is a regular mentorship program in which the healthcare providers at the hospital level share their experience with the health professionals of rural health centers.*" (Zonal Health Department, MCH head)

Mobile health

The mobile health team is organized and actively working in the selected woredas, moving along with the community while the community migrates at different seasons from one place to another. The team includes different health professionals who can provide major health services for the community. CAC service is also given as part of the packages of mobile health services. This strategy is mostly practiced within the Borena zone.

"*So, we are providing the mobile health service which fits the lifestyle of pastoralist communities. CAC service is one of the health services provided in the mobile health services*" (Regional Health Bureau, RH officer)

Health information and education

Cultural stigma and social attitudes towards abortion significantly impact the provision of the services since they discourage users from utilizing the service based on the legal framework. There is a need for increased community awareness and education to address these issues. Even though the policy of the country doesn't allow them, unmarried women go for other alternative practices, unsafe abortion, which results in complications and life-endangering conditions due to the fear of social stigma.

There are no social and behavioral change programs specifically focusing on improving awareness regarding CAC. Despite community awareness regarding the legality of the service, there are no health education programs designed and implemented on this concern. Community understanding and awareness around the service is important to maintain the service and maintain its quality and standard.

"*Since ever I haven't experienced any health education program regarding abortion services, even on its legality. Maybe mostly the emphasis is on teaching about sexual and reproductive health.*" (Health center, MCH head)

Theme 8: Contextual barriers

The unique characteristics of the pastoralist communities are posing them with greater challenges in accessing all health services, and specifically the CAC service. Those unique characteristics are worsening the health system barriers associated with the provision of CAC services. The following are some of the major unique characteristics of the pastoralist communities.

Lifestyle

Obviously, pastoralist communities are mobile in their lifestyle. Their settlements are sparsely located, with around 100 kilometers to reach one kebele from another kebele. Females are equally responsible for outdoor activities like keeping cattle or camels and going to fetch water from a long distance.

"*…It is mostly related to their lifestyle. They are mobile and settle where they prefer. However, it is the responsibility of the government to provide the service for them at their residency area.*" (MCH Head of Borena zone Health Department)

"*When the agrarian live permanently, the pastoralist communities are mobile. So, their lifestyle has its own impact on the service you provide for the community. For the permanent communities, you can establish the service fixed in a given area.*" (RH officer of Oromia Regional State Health Bureau)

Infrastructure

Pastoralist communities are less developed with infrastructural facilities, namely, a lack of electricity, network, and water facilities. The road networks are also not well constructed to reach each and every woreda for easy access to the necessary health services. Here, the equity issue can be raised as the main concern.

"The recommended number of health facilities per population size is still not adequate in the pastoralist communities. On the other hand, it is

about the equity issue. The way service availability is made nearby for the urban resident, when compared to mothers in the remote rural area of the pastoralist community, is not fair." (MCH professional of the West Guji zone Health Department)

"*...You can take the human power of health professionals is high in the agrarian communities. The infrastructures are also more developed among the agrarian communities.*" (RH officer of Oromia Regional State Health Bureau)

"*...Particularly those who are located in remote or rural areas are less accessible to abortion services. If you take Taltalle, some kebeles are located more than one hundred kilometers from the woreda health center. Some are 85 km away, and others are more than a hundred kilometers distance, and others may be less than that, being different from woreda to woreda.*" (MCH Head of Borena zone Health Department)

Socio-cultural

The socio-cultural characteristics of the pastoralist communities are unique and conservative. Such sensitive issues as abortion services are highly stigmatized among these communities. On top of that, the health-seeking behavior of the community is very low.

"*Socio-cultural factors such as the stigma surrounding abortion and financial barriers also hinder access to CAC services.*" (RH officer of Oromia Regional State Health Bureau)

"*Community awareness and healthcare-seeking behaviors are major concerns where many members are opting for traditional practices.*" (MCH head of Borena zone Health Department)

Geography

Geographically, pastoralist communities are located very far from the central administration of the country, which makes them less accessible to development opportunities and technological advancements.

"*They are highly dispersedly populated. Pastoralist communities are desert areas where professionals do not prefer to stay long; so, there is high turnover.*" (RH officer of Oromia Regional State Health Bureau)

"*Accessibility is a significant challenge, especially for those living in rural areas due to distance and transportation.*"(Woreda, MCH head).

Discussion

The findings of this study provide a comprehensive understanding of the health system barriers affecting the provision of CAC in the pastoralist communities of the Oromia regional state, Ethiopia. These barriers are interrelated, encompassing a range of barriers from logistical challenges to health system inadequacies.

One of the most significant barriers identified is the challenges in the availability and accessibility of CAC services. Health facilities in pastoralist communities are often inadequately equipped, lacking essential instruments, medications, and dedicated spaces for the service. The integration of CAC with other maternal services further compromises the quality and privacy needed for abortion care, leading to a tendency to utilize traditional practices and self-administered medications. The limited number of health facilities capable of providing CAC and the distances that must be traveled to reach these facilities also pose significant challenges, particularly for women in remote areas. These findings are consistent with national and global studies that revealed distance and lack of service availability as barriers to accessing abortion care.[16, 20-22]

The study revealed a critical shortage of adequately trained healthcare providers in the pastoralist communities. High staff turnover, inadequate numbers of skilled personnel, and a general lack of competency in abortion care services were frequently mentioned by participants. This shortage is further worsened by negative attitudes and a wrong belief held by some healthcare providers toward abortion, which further limits the provision of the services directly by affecting the motivation of other professionals who provide the service and the confidence of the service users. Many other studies highlighted similar points in this regard.[17-19, 23.] This clearly indicates the need for targeted training and capacity-building initiatives to enhance the skills and attitudes of healthcare providers in these areas, nationally as well.

Another significant barrier identified relates to systemic and management issues within the health system and health facilities. There is a noted lack of commitment from management bodies, less emphasis from management bodies, a poor culture of data management, and inadequate feedback mechanisms, all of which contribute to the inefficiency and ineffectiveness of CAC services provision. This finding aligns with other studies conducted in similar settings[6,24] These management-related barriers point to a need for stronger leadership and governance within the health system, from the higher level to the lower level, to improve service delivery and ensure compliance with national policies and standards.

Financial constraints are a wide issue, affecting both the capacity of health facilities to provide CAC services effectively and the ability of women to afford these services. The lack of financial resources for capacity building, procurement of necessary supplies, and service provision is highlighted as a key barrier. Additionally, the cost of services can be prohibitive for many women, particularly in these underserved communities, where economic disadvantages are common. Previous studies underscored the financial challenges in pastoralist communities[25,26] Addressing these financial barriers is crucial for improving access to safe and legal abortion services.

The unique socio-cultural and geographical context of pastoralist communities presents additional challenges to the provision of CAC. Traditional practices, cultural beliefs, and societal norms around abortion significantly influence women's health-seeking behaviors and their willingness to use formal health services, which worsen the existing health system barriers. The geographical remoteness of these communities further complicates access, as many areas are difficult to reach due to poor infrastructure. These findings align with other studies that emphasize the impact of socio-cultural and geographical factors on healthcare access in similar settings (6-9).

Despite these barriers, some positive initiatives, such as mentorship programs and mobile health teams, have been identified as beneficial in improving the provision of CAC services. These initiatives help bridge the gap in service provision, particularly in remote areas where health facilities are less equipped with skilled professionals and where modern health facilities are inaccessible. The impact of these programs suggests that expanding similar initiatives could be an effective strategy for overcoming some of the identified barriers by this study.

Strengths and limitations

Applying the thematic analysis framework (Health Systems Framework and Access to Healthcare Framework), the study identified important health system barriers affecting CAC services, focusing on pastoralist communities, which are often underserved in health services, including CAC services. This gives the research practical significance since it focuses on a vulnerable population.

However, this study is not without limitations. The research relies solely on key informants' interviews with health workers and officials, which could introduce bias. The study did not include perspectives from women in the pastoralist communities regarding the health system barriers affecting the provision of CAC services. This is particularly critical for a comprehensive understanding of health system barriers to the accessibility of the service. For policy and practice, the study findings provide important insights into health system side barriers, but need to be complemented by women's perspectives as well as the whole community's perspectives before being used as the sole basis for interventions. The future studies can focus on the community perspective regarding the health system barriers affecting CAC services in this context.

Conclusion and recommendation

The findings highlight significant disparities and barriers in accessing CAC services in the pastoralist communities of Borena and Guji zones of the Oromia region. These health system-level barriers include gaps in accessibility and availability, provider inadequacy in number and competency, financial barriers, weak commitment from management bodies, poor information provision, and unique contextual characteristics of pastoralist

communities. Inequity aspects in the provision of service and infrastructural development, which are paramount in the pastoralist setting, are at the core of those health system barriers.

Addressing these issues requires a multifaceted approach involving improved infrastructure, better training for providers, enhanced community education, ensuring continuous support from stakeholders, and strong policy implementation and advocacy efforts at all government and community levels. Sustainable initiatives and a robust legal framework are thus essential for long-term improvements in the provision of CAC services.

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Contribution of authors

Tolasa Yadate conceived the research idea and designed the study, participated in data collection, data analysis, interpretation of data, and preparation of the manuscript. Finina Abebe, Menen Tsegaw, and Chala Damena reviewed the research proposal and finally validated the manuscript. Abel Negussie closely supported the principal investigator during proposal writing and supervised during data collection, analysis, and manuscript writing. Dr Assefa Seme supervised the whole process of research and reviewed the manuscript.

References

1. CAC. In: Inter-Agency Field Manual on Reproductive Health in Humanitarian Settings: 2010 Revision for Field Review [Internet]. Inter-agency Working Group on Reproductive Health in Crises; 2010 [cited 2024 Mar 16]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK305158/
2. World Health Organization. Safe Abortion: Technical and Policy Guidance for Health Systems. World Health Organization; 2003. 107 p.
3. Gebrehiwot Y, Fetters T, Gebreselassie H, Moore A, Hailemariam M, Dibaba Y, Bankole A and Getachew Y. Changes in Morbidity and Abortion Care in Ethiopia After Legal Reform: National Results from 2008 and 2014. Int Perspect Sex Reprod Health. 2016;42(3):121–30.
4. Dibaba Y, Dijkerman S, Fetters T, Moore A, Gebreselassie H, Gebrehiwot Y and Benson J. decade of progress providing safe abortion services in Ethiopia: results of national assessments in 2008 and 2014. BMC Pregnancy Childbirth [Internet]. 2017 Mar 4 [cited 2023 Jul 14];17(1):76. Available from: https://doi.org/10.1186/s12884-017-1266-z
5. Holcombe SJ and Kidanemariam Gebru S. Agenda setting and socially contentious policies: Ethiopia's 2005 reform of its law on abortion. Reprod Health [Internet]. 2022 Jun 13 [cited 2023 Jul 20];19(1):218. Available from: https://doi.org/10.1186/s12978-021-01255-z
6. Jebena MG, Tesfaye M, Abashula G, Balina S, Jackson R, Assefa Y, Kifle K, Tesfaye C, Yilma M, Hiruy A, Teklu A, Bezawit AB, Assefa E, Demissie M, Mitike G and ushune K. Barriers and facilitators of maternal health care services use among pastoralist women in Ethiopia: Systems thinking perspective. Pastoralism [Internet]. 2022 Jun 23 [cited 2023 Jul 19];12(1):27. Available from: https://doi.org/10.1186/s13570-022-00236-6
7. Wild H, Mendonsa E, Trautwein M, Edwards J, Jowell A, GebreGiorgis Kidanu A, Tschopp R and Barry M. Health interventions among mobile pastoralists: a systematic review to guide health service design. Trop Med Int Health [Internet]. 2020 [cited 2023 Jul 19];25(11):1332–52. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/tmi.13481
8. Gammino VM, Diaz MR, Pallas SW, Greenleaf AR and Kurnit MR. Health services uptake among nomadic pastoralist populations in Africa: A systematic review of the literature. PLoSNegl Trop Dis [Internet]. 2020 Jul 27 [cited 2023 Jul 19];14(7):e0008474. Available from: https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0008474
9. Mohamed A. Pastoralism and Development Policy in Ethiopia: A Review Study. Bp Int Res Crit Inst BIRCI-J Humanit Soc Sci. 2019 Nov 6;2:01–11.
10. Kaba M. Systems Thinking for Pastoral Health: Challenges and Prospects in Ethiopia. In: Vallières F, Mannan H, Kodate N, Larkan F, editors. Systems Thinking for Global Health: How can systems thinking contribute to solving key challenges in Global Health? [Internet]. Oxford University Press; 2022 [cited 2023 Jul 19]. p. 0. Available from: https://doi.org/10.1093/oso/9780198799498.003.0019

11. Sheehy G, Dozier JL, Mickler AK, Yihdego M, Karp C and Zimmerman LA. Regional and residential disparities in knowledge of abortion legality and availability of facility-based abortion services in Ethiopia. Contracept X [Internet]. 2021 Jun 22 [cited 2023 Jul 20];3:100066. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8267565/
12. Bearak J, Popinchalk A, Ganatra B, Moller AB, Tunçalp Ö, Beavin C, Kwok L and Alkema L. Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990–2019. Lancet Glob Heal. 2020;8(9):e1152–61.
13. Gebremariam FA, Habtewold EM, Degife DT, Geneti HB and Gebrekiros DH. Health facilities' readiness to provide CAC and factors associated with client satisfaction in Central Oromia Region, Ethiopia: a multilevel modeling approach. Reprod Health [Internet]. 2023 May 11 [cited 2023 Jul 17];20(1):72. Available from: https://doi.org/10.1186/s12978-023-01610-2
14. World Health Organization. (2007). Everybody's Business: Strengthening Health Systems to Improve Health Outcomes: WHO's Framework for Action. World Health Organization. Available online at: https://www.who.int/healthsystems/strategy/everybodys_business.pdf
15. Penchansky R. and Thomas JW. (1981). The concept of access: Definition and relationship to consumer satisfaction. Medical Care, 19(2), 127–140.
16. Dias Amaral B and Sakellariou, D. (2021, September 21). Maternal Health in Crisis: A Scoping Review of Barriers and Facilitators to Safe Abortion Care in Humanitarian Crises. Frontiers in Global Women's Health, 2. https://doi.org/10.3389/fgwh.2021.699121
17. Balcha T, Semahegn A, Tamiru D, Yadeta E, Abdisa L and Tesfaye G. Attitudes toward safe abortion care and its associated factors among health care providers working in public health facilities in eastern Ethiopia. SAGE Open Med. 2022 Jun 27;10:20503121221107792. Doi: 10.1177/20503121221107792. PMID: 35784668; PMCID: PMC9244926.
18. Ushie BA, Juma K, Kimemia G, Ouedraogo R, Bangha M and Mutua M. Community perception of abortion, women who abort and abortifacients in Kisumu and Nairobi counties, Kenya. PLoS One. 2019 Dec 12;14(12):e0226120. doi: 10.1371/journal.pone.0226120. PMID: 31830102; PMCID: PMC6907763.
19. Assefa EM. Knowledge, attitude, and practice (KAP) of health providers towards safe abortion provision in Addis Ababa health centers. BMC Women's Health 19, 138 (2019). https://doi.org/10.1186/s12905-019-0835-x
20. Samandari G, Kapp N, Hamon C and Campbell A. Challenges in the abortion supply chain: a call to action for evaluation research. Reprod Health. 2021 Jan 20;18(1):14.
21. Doran F and Nancarrow S. Barriers and facilitators of access to first-trimester abortion services for women in the developed world : a systematic review. 2015;170–80.
22. Amaral BD and Sakellariou D. Maternal Health in Crisis : A Scoping Review of Barriers and Facilitators to Safe Abortion Care in Humanitarian Crises. 2021;2(September):1–10.
23. Barudin S. Assessment quality of safe abortion service provision: client-provider interaction in safe abortion service in public and private health facilities of Adama town, Oromiya, Ethiopia. Jimma University; 2014. :
24. Ishola F, Ukah UV, Alli BY and Nandi A. Impact of abortion law reforms on health services and health outcomes in low- and middle-income countries: a systematic review. *Health Policy and Planning* 2021; 36: 1483–1498.
25. Improving Productivity for Pastoralists and Agro-pastoralists Across the Sahel. In: World Bank. https://www.worldbank.org/en/results/2020/10/19/improving-productivity-for-pastoralists-and-agro-pastoralists-across-the-sahel.
26. SOCIAL ASSESSMENT REPORT, https://documents.worldbank.org/curated/en/361031468030840773/pdf/IPP6640PCDP0II000PUBLIC00Box379843B.pdf (September 2013).