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Challenges and suggestions to promote maternal service provision and utilisation under the free maternal health policy in Ghana: Perspectives of health directors and facility managers

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Abstract

Introduction

To promote service uptake and reduce maternal deaths, a policy was implemented under Ghana's National Health Insurance Scheme in 2008. This article explored the benefits and limitations of the policy as well as health system challenges. The study also examined community-level challenges and provide suggestions to mitigate the challenges.

Methods

The study was cross-sectional, utilising qualitative data collection. It was carried out in the Kassena-Nankana East Municipality, Ghana, involving in-depth interviews (IDIs) with directors of Ghana Health Service and facility managers. A total of 8 IDIs were conducted. Data were transcribed, read and analysed based on themes which were presented using key quotes.

Results

The policy promoted the use of services. Nonetheless, challenges existed such as limited service coverage, inadequate human resource and infrastructure, lack of drugs and equipment, lack of transport, influence of religious, cultural and family members. Suggestions included the need to exclude women considered to be wealthy, inclusion of family planning services, accreditation of private facilities, provision of a shift system for specialists to move to rural areas and provision of incentives for health personnel in rural areas. It was also suggested for health personnel to make public their challenges and to provide education on women's rights and service expectations. The provision of transport vouchers to women as well as alternative arrangements to be made with private transport owners were also suggested.

Conclusion

Implementing the suggestions may improve service provision and utilisation leading to the reduction of maternal deaths and contributing towards achieving universal health coverage.

Key words: Maternal health; fee free policy; health insurance; utilisation; Ghana

Introduction

Maternal deaths continue to be a major public health challenge especially in low to middle income countries (LMIC). In 2017, 295,000 maternal deaths were recorded globally (WHO, 2019). LMICs in sub-Saharan Africa and Southern Asia regions account for about 86% (254,000) of the estimated global maternal deaths in 2017 (WHO, 2019). For the same year, countries in sub-Saharan Africa region alone accounted for about 66% (196,000) of the global maternal deaths (WHO, 2019).

The causes of maternal deaths are both direct and indirect. Direct causes include excessive obstetric blood loss, infection, high blood pressure, unsafe abortion and obstructed labour (Hanson et al., 2015; Say et al., 2014). The indirect causes of maternal deaths are an exacerbation of existing conditions such as HIV infection, diabetes, mental health conditions, anaemia, malaria and heart diseases (Paul, Mohapatra, & Kar, 2011; Say et al., 2014; Storm et al., 2014). Many maternal deaths can be avoided when women are able to access the needed and necessary health services at the time of pregnancy and when they give birth in well-equipped health facilities including the availability of emergency obstetric care (Nionzima & Otim, 2020; Nove et al., 2021; Renfrew & Malata, 2021). Women are encouraged to utilise health facilities when pregnant and to plan to give birth with a skilled birth attendant. Unfortunately, this is not always achievable. A systematic review on maternal deaths in health facilities in Western Africa enumerated challenges such as cost, poverty, distance to facilities, lack of information, inadequate and poor quality services, lack of health personnel, lack of equipment and supplies and cultural beliefs and practices impeding access to care (Akter, Davies, Rich, & Inder, 2020).

An important strategy to addressing maternal mortality is universal health coverage (UHC). UHC is vital for the promotion of health and wellbeing and has been incorporated as one of the targets for the Sustainable Development Goals (target 3:8). The target envisioned that by 2030, all countries should

achieve UHC for their populations, including financial risk security as well as the availability of essential quality health services, medicines and vaccines (UN, 2016).

Many countries have undertaken health sector reforms to help achieve UHC with a focus on maternal health. As an example, Ghana implemented the National Health Insurance Scheme (NHIS) in 2005. The chief goal of the NHIS is to assist promote the utilisation of services for all Ghanaians. In 2008, a free maternal health policy was enacted, allowing free of cost registration to the NHIS by all pregnant women in the country. The policy sought to eliminate out of pocket (OOP) payments and enhance the utilisation of maternal health services. However, family planning services were excluded from the benefits package of the policy. Ultimately, the policy sought to reduce maternal deaths at the country level and contributing to global efforts. In Ghana, as in other LMICs, maternal deaths remain a challenge. For instance, the lifetime risk of maternal deaths was estimated to be 1 in 82 women, with about 27,000 maternal deaths recorded in 2017 (WHO, 2019).

Given the implementation of the policy in Ghana, studies have shown an increase in the utilisation of both antenatal and childbirth services (Agbanyo, 2020; HERA, 2013; Twum, Qi, Aurelie, & Xu, 2018). In particular, a study in the middle belt of Ghana demonstrated that women registered under the free maternal health policy were 5.3 times more likely to give birth in health facilities compared to those not covered (Twum et al., 2018). Other studies have found that OOP payments were still prevalent for maternal health services despite the free maternal health policy (Dalinjong, Wang, & Homer, 2018; HERA, 2013). The existence of OOP payments and other barriers affect utilisation and limit efforts to reduce maternal deaths. This paper explores the benefits and limitations of the free maternal health policy as well as health system challenges in service provision which might lead to maternal deaths, especially in health facilities. The paper also examines community-level challenges affecting the utilisation of maternal health services and provide suggestions for their mitigation. The study contributes to the discussion on ways to improve the provision and utilisation of health services for the reduction of maternal deaths in the era of the free maternal health policy.

Methods

Study design, area, sampling, tools and data collection

This paper is part of a larger study carried out in the Kassena-Nankana East Municipality of the Upper East Region, Ghana. The main study is titled "Access to maternal health services under the free maternal health policy in the Kassena-Nankana East municipality of Ghana". The municipality is one of the 15 districts located in the Upper East Region. The Kassena-Nankana East Municipality has a total population of 118,441 (males being 57,824, while females are 60,617) (USAID, 2017). Agriculture is the mainstay of the municipality employing over 65.4% of the population (KNEDA, 2013). The municipality has one main referral hospital, three health centres, and seventeen Community-based health planning and services (CHPS) compounds. Basic maternal health services are provided in most of the health facilities especially immunisations.

The study was cross-sectional and used mixed methods, involving the use of quantitative and qualitative data collection. It explored the perspectives of stakeholders (women, health providers and facility managers, insurance managers, directors of health service) on the operations of the free maternal health policy in 2016 (Dalinjong et al., 2018). This paper used data from the qualitative component of the study; that is, in-depth interviews (IDIs) with key directors of Ghana Health Service and health facility managers in the study area.

A total of eight (8) IDIs were conducted; four (4) IDIs were conducted with the directors of Ghana Health Service. The directors comprised of the municipal director of health for the Kassena-Nankana East Municipality, the regional director of health (Upper East Region) and two deputy directors who were in charge of maternal health at the national level (headquarters of the Ghana Health Service). The other four (4) IDIs were held with facility managers in the study area. The managers were from four major health facilities. These facilities were involved in the provision of maternal health services; one being the

municipal hospital and the three being health centres. Purposive sampling was used to recruit the study participants, focussing on participants who held strategic positions within the Ghana Health Service. Interviews were carried out in the offices of the participants, without the presence of other people to ensure confidentiality. The study was conducted by two well trained and experienced research assistants.

Semi-structured questions were used, focusing on the importance and limitations of the policy as well as the challenges faced by the health system in service delivery. The study also explored strategies that are required to strengthen the operations of the policy as well as the health system for improved service delivery. The IDIs were conducted in English and each lasted for about 45-60 minutes. This paper utilised the data collected from the semi-structured questions.

Data management and analysis

The qualitative data were analysed both manually as well as with the use of NVivo 12 software package. Manually, the transcripts were listened to and transcribed verbatim as text into a word document. The text was read several times to allow familiarity with the data. Further, the data were entered into the NVivo software and read several times. This was to help identify and categorise the data into themes and sub-themes. The presentation of the findings were done according to the themes and subthemes. Importantly, key quotes were identified and these quotes were used to support the findings of the study. The analysis was both deductive and inductive, drawing on previous knowledge as well as on the categories that emerged from the data.

Ethical approval to conduct the study was done by the Ethical Review Board of the Navrongo Health Research Centre in Ghana (NHRCIRB217) and the Human Research Ethics Committee of the University of Technology Sydney, Australia (ETH16-0263).

Results

The study involved 8 IDIs with key directors of health (4) and health facility managers (4). It examined the benefits and limitations of the free maternal health policy; health system challenges in service provision as well as community-level challenges affecting the use of services. Suggestions to mitigate the challenges were also reported.

Benefits and limitations of the free maternal health policy

The participants believed that financial barriers to the use of services have been removed, following the introduction of the policy. They felt that it was a good intervention and was working. A participant said:

> *………… at least the policy is there and it's working to a very large extent for the use of health services* (Regional director).

The policy enabled pregnant women to attend and utilise services at the facilities when required. Overall, it was felt that it had led to an increase in the utilisation of skilled personnel for childbirth in the country. A participant reported the following:

> *Because if you look at our demographic and health survey, since 2008 to the 2014 one that we have, skilled delivery has shot from 59% to 73% (almost 74%), and that is the greatest jump ever* (Director, headquarters).

Nonetheless, it was revealed that the policy was not comprehensive enough to cover complications encountered by women at the time of childbirth. Complications meant that women and their families would need to make OOP payments. The ability to quickly raise money and make such payments was challenging for families. The inability to pay for such services lead to delays and consequently, deaths in health facilities. A participant explained:

> *…..a woman who has had hypertensive disorders in pregnancy and she has suffered from pre-eclampsia or eclampsia, she has had a caesarean; the caesarean will be free, but supposing there is a complication and her system starts shutting down, like her kidneys because of the nature of*

the ailment and she has to go on an intensive care for example, it's not covered by insurance (Director, headquarters).

Health system challenges in service provision

Inadequate human resources and infrastructure

Participants reported that health facilities had exceeded their capacity to manage attendance by women, following the implementation of the policy. Human resource and infrastructure were particularly challenged. The increase in utilisation was not matched by an increase in human resource and infrastructure in the facilities. A participant said:

> *The human resource that we have a challenge with is the fact that hitherto, women were not coming to facilities, but now they're coming; but it's the same human resource taking care of them, the same infrastructure, and so it becomes a problem* (Director, headquarters).

Quality of care is affected when facilities are overburdened. The participants added that while public facilities are overburdened, private facilities were not being utilised, especially those that have not been approved by the NHIS to provide services to clients. Such private facilities would require direct OOP payments for health service utilisation. Hence women were not visiting such facilities for the use of services.

There is also an uneven distribution of health personnel in the country, favouring urban areas. Health personnel prefer to accept postings to urban areas than to rural areas. Politicians were accused of being partly responsible for the uneven distribution of health personnel in the country. Politicians are noted to always lobby for their children and relatives to be posted to urban areas.

> *I will tell you that a politician too who has trained his children will not let them be posted to rural areas. We know because we see that every day. If at all, they're given postings to rural areas, they won't go* (Facility manager).

The uneven distribution of health personnel affects the effective functioning of facilities in rural areas. In such areas key personnel such as medical doctors and other specialists were not available to handle complications encountered by pregnant women.

Lack of drugs and essential equipment

Maternal deaths occur in facilities due to lack of drugs and other essential equipment. The Community-based health and planning service compounds and other smaller health facilities are set up to assist reduce maternal deaths, however they do not have the required infrastructure to function as expected, especially in terms of handling complications. Women with complications in pregnancy are referred to hospitals which are lacking drugs and essential equipment, thus leading to maternal deaths. A participant indicated:

> *So it's the hospital that will treat such things [complications such as hypertension in pregnancy]. But this is a complication that a common drug that should have been there to treat is not available. The drug is not stocked in the pharmacy [of the hospital]. The woman unfortunately loses her life because the hypertension could not be controlled* (Regional director).

Community-level challenges affecting use of services

Lack of transportation at the community-level to facilities

There is lack of ambulance services in some parts of the country, especially to remote communities. As a result, some women are disadvantaged in terms of their access to transportation to facilities. Women in rural areas especially, rely on public transport to be able to access facilities. While public transport is considered inappropriate for the conveyance of women in labour to facilities, in some communities it is not even available or if available, not on a regular basis. A participant reported:

> *And we keep on saying that even though the free maternity service is a good policy, there are some [women] who by where they're staying, their geographical location, it can be free and they still will not benefit because access to transportation is a problem. For some people they see the*

transport only once a week if they're lucky at all. So such people are already cut off right from the start (Director, headquarters).

Due to lack of transport, women with complications arrive in facilities with conditions that are far beyond management and thus end up dying.

Some of the women are rushed to our facilities in very bad states. When questioned, relatives would respond that they couldn't get transportation early from home (Facility manager).

Influence of religion, culture and family

Religious and culture beliefs were seen to have affected the use of services. Belief in witchcraft especially, deter pregnant women from reporting early to facilities for use of services. A participant said:

For instance, you're supposed to report for antenatal services as soon as you suspect you're pregnant. But people still think that when they announce the pregnancy too early, or when they go to the hospital too early and witches get to know that they are pregnant, they will terminate it or they'll abort it. So all these are still negative cultural or religious influences that are affecting service use (Facility manager).

Family members and relatives influence women's utilisation of services. Family heads and mothers-in-law particularly, are key influential people who determine when pregnant women should visit facilities. Their decisions affect the early attendance to facilities for childbirth. These delays could lead to deaths.

At home too, some of them [women] encounter a lot of challenges from their relatives, especially mothers-in-law who will insist "don't go to hospital. Wait till the baby is near before going" (Regional director).

Suggestions to mitigate the challenges

Making the policy to be discriminatory

The participants felt that the insurance policy should be discriminatory positively for poor or poorer women. They felt that women who are classed as richest or rich, should be discriminated against and not receive free health cover for the use of services. A participant explained:

> *So maybe the policy must be a little bit discriminatory to deepen the pro-poor intervention that it covers, and I think for me, you don't even need every woman to be covered. If we are able to divide women's wealth into wealth quintiles, then those at the lowest quintiles and maybe the bottom one and two may need that, a little bit discriminatory, it will really go and help those who really need it* (Director, headquarters).

Participants recommended that beneficiaries of an existing social intervention program called Livelihood Empowerment Against Poverty (LEAP) should be prioritised and enrolled as a target group to benefit from the policy. This allows women already classified as being poor under the program to be able to benefit from the policy. A set criteria has been used to identify the LEAP beneficiaries.

> *Households that benefit from Livelihood Empowerment Against Poverty program are those who should be considered first under any free scheme including transportation and health services before we start going up* (Director, headquarters).

It was also suggested that there should be cost sharing with women and their families who are formal sector workers or who have a regular source of income. This, to some extent will make the NHIS to be able to meet its commitments in terms of timely reimbursement of funding to facilities for service provision.

> *Women and families working in the formal sector and who have a certain salary bracket should be able to have; there should be some sort of cost-sharing arrangement so that the scheme [The National Health Insurance Scheme] will be vibrant* (Facility manager).

Accreditation of private facilities for service provision

To reduce the burden on public facilities with regards to utilisation, it was recommended for the accreditation of more private facilities for the provision of services. These private facilities should be licensed by the NHIS to provide services to women. This will be useful for the urban areas particularly, where woman requiring caesarean sections are often reprioritised in terms of the seriousness of their conditions. For instance, a participant reported:

> *.....in regions with very large populations and therefore large expected pregnancies, there is need to involve the private sector in a way so that the public facilities are not overstretched* (Director, headquarters).

Inclusion of family planning services

Family planning services need to be included under the policy. This will be very beneficial to poor women especially.

> *So that's why we're even pushing that some aspects of family planning services should be free so that it sends a right message that we're not just asking women to deliver, we're asking them to be in general control of their reproductive health* (Director, headquarters).

Creating an incentive system to support rural services

Another suggestion was to create an incentive system for specialists in urban areas to move to rural areas to help solve the problem of lack of specialists in such areas. This should be done on a regular basis, assisting rural areas to benefit from the services of such specialists. Women with complications would be managed properly if there is such a system in place.

> *For me, the incentive we should put in place is that we should make it such that the specialists we have in the cities, there will be a sort of arrangement where they will be providing periodic cover,*

especially over the weekends to hospitals in the rural areas (I mean hospitals, not just common health centres) – hospitals with just one doctor (Regional director).

Participants felt that incentives should also be provided to health personnel who accept postings to rural areas. This will improve the availability of services in such areas and thus lead to good health outcomes for women in particular. A participant stated:

So when you're asking somebody to go to a rural area, how are you incentivizing the person so that the person will be comfortable? And how are you doing it such that the person does not lose-out, because his mates have gone far ahead of him, because you've decided to put him in a…., excuse me to say God-forsaking place without paying attention to his career needs and other social amenities and all that? (Regional director).

Communicating the challenges of service provision to the public

Participants were keen that civil society and the general public should be made to understand the challenges faced in the course of service provision. They felt that this would assist the public to appreciate the problems faced by health personnel. Armed with this knowledge, civil society and the general public would hold government accountable to its commitment to ensure the appropriate inputs are available for service provision. This is a statement by a participant:

This is what the public needs to hear. Health workers should spell them [the challenges] out and let them [the general public] understand, so that they [the general public] will be requesting from the state. When you have a lot of civil societies requesting from the state,….. now it becomes a political issue so the politician will have to sit down and address. So that's the gap that is missing, and we really need that (Director, headquarters).

Informing women of their rights and service expectation

In addition, women should be informed about their rights to health as well as what to expect when utilising services. With information, women can hold health personnel accountable when their rights are infringed upon or when their expectations are not met. A participant indicated:

> *If she's given that form of education that "this is what you should expect to receive and then insist on it"; because when she knows and she's insisting on it and the thing is not there, and that is where the cat starts making the noise for all and sundry to hear. And then also for them to know that, for example when you're a woman and you're having headache and a midwife tells you that we need to admit you to monitor it, you won't say that "oh no I'm going home – I'll think about it", but you should know how dangerous it is because it's leading to pre-eclampsia which is potentially dangerous to you and your baby. Because we're finding that the women who are coming with pre-eclampsia and they don't take note of it or they're not properly informed; when I say properly informed, maybe the midwife has told you, you need admission – the woman doesn't know the extent to which it's, so she needs to understand and she knows the progression of the complication* (Regional director).

Women who are well informed would be able to better take control of their lives and utilised services at the required time.

Making alternate arrangement with private transport owners

Transport to facilities was a significant issue and participants felt that private transport owners should be invited to assist. Arrangements should be put in place to allow rural women to utilise private transport without immediate payment. The payment could be made by the NHIS on behalf of the women.

> *So in the rural places where we deal with them [community members], we encourage them to have community transport systems in place, and that's what some districts are doing, and or having some arrangement with the Ghana Private Road Transport Union to transport the women without*

insisting on money first so that they can be reimbursed from their organisation (Regional director).

Another suggestion to help reduce transport challenges for women, especially those in rural areas was for them to be issued with transport coupons for access to public transport. With such coupons, women would be able to access public transport without any direct payment when visiting facilities. A participant reported:

……. not for city dwellers, but those in the rural areas where they stay, like for example I know that Metro Mass transport go there, is it possible that in this scheme or under another scheme, women would have free transport coupons so that they can access services (Director, headquarters).

Discussion

The study involved IDIs with select key directors of the Ghana Health Service and facility managers. The focus of the study was on the benefits and limitations of the free maternal health policy as well as health system challenges impeding the provision of services. The study also explored community-level challenges affecting the use of services, with suggestions offered for their mitigation.

Participants of the study felt that the policy is beneficial. It has eliminated financial barriers associated with the use of services, leading to increased utilisation in many areas. This has been reported in similar studies conducted in Ghana (Agbanyo, 2020; Yaya, Da, Wang, Tang, & Ghose, 2019). A report by the Ghana Health Service showed an increase in the utilisation of skilled birth attendance from 42.2% in 2008 to 56.2% in 2016 (GHS, 2017). Evidence elsewhere showed the lack of drugs and equipment, delay in seeking health services as well as socio-cultural factors as non-medical causes triggering maternal deaths in health facilities (Adewemimo, Msuya, Olaniyan, & Adegoke, 2014; Gunawardena, Bishwajit, & Yaya, 2018).

The findings indicated that the policy was not comprehensive in terms of all aspects of service coverage. Certain services, such as, the cost of transportation to health facilities, cost of blood products and transfusion, and the treatment of complications arising from pregnancies were not covered by the policy (Blanchet, Fink, & Osei-Akoto, 2012; Dalinjong et al., 2018). A shift towards positive discrimination was suggested to ensure poorest women have preferential access over richer women. This would make services available to those who need them most. It is also important that family planning services are included in the policy. This will particularly empower women to be able to take control of their reproductive lives (Blackstone, 2017; Prata et al., 2017). Poor women especially will be able to plan as to when to give birth which could eventually improve their health and well-being, thus reducing maternal deaths overall (Chola, McGee, Tugendhaft, Buchmann, & Hofman, 2015; Ganatra & Faundes, 2016). In addition, the participants tasked the NHIS to ensure the accreditation of private facilities, especially in urban areas where public facilities are found to be over-burdened. Though, the current operations of the NHIS include private facilities, this should be expanded to include more private facilities in urban areas especially.

Inadequate human resources, infrastructure as well as lack of essential drugs hampered the provision of services to women. Similar studies in Kenya revealed that the implementation of a similar policy brought about increased utilisation of services, with no matched increase in the infrastructure base of facilities (Lang'at & Mwanri, 2015; Tama et al., 2018). Studies have identified these barriers as supply-side factors, impeding the effective provision of quality health services (Ensor & Cooper, 2004; Jacobs, Ir, Bigdeli, Annear, & Van Damme, 2012). Nonetheless, the implementation of a given health policy should come with supply-side investments to allow facilities function as expected. Such investments as suggested by the participants include the provision of incentives for health personnel and the implementation of a rotational system for specialists to be routinely taken to rural areas for service provision. Without such investments, set policy objectives might not be achievable.

Other proposals were for health personnel to provide information on their challenges to the general public for support and also to provide women with information about their entitlements in service utilisation. The provision of education for women, particularly during antenatal attendance has been found to be very beneficial for good health outcomes (Al-Ateeq & Al-Rusaiess, 2015; Sumankuuro, Crockett, & Wang, 2017).

Lack of transportation from the community-level to health facilities was another challenge identified. The unavailability of transport is considered as one of the delay factors affecting access to facilities (Thaddeus and Maine 1994, Sk 2019, Aden et al 2019). A recent review on barriers to accessing maternal health service in Africa identified transportation as one of the key factors hampering women's utilisation of services (Dahab and Sakellariou 2020). Transport vouchers and arrangement with private transport owners may help women access facilities. There is a strong positive link between the use of transport vouchers and utilisation of services, including the use of skilled personnel for childbirth by poor women (Hunter, Harrison, Portela, & Bick, 2017; Mahmood et al., 2019; Van de Poel, Flores, Ir, Owen;, & Van Doorslaer, 2014). These suggestions when adhered to, would facilitate the use of services and ultimately assist reduce maternal deaths in the country.

Both religious and cultural beliefs contribute to poor maternal outcomes. A systematic review in India found religious and cultural factors to negatively affect the use of services (Hamal, Dieleman, De Brouwere, & de Cock Buning, 2020). Women belonging to the caste system were found to make less use of services, both antenatal and childbirth, and had bad health outcomes especially maternal deaths (Hamal et 2020). Likewise, a qualitative study in Ghana, revealed that women belonging to certain religious sects would rather die than accept blood transfusion when the need arises (Yarney, 2019). Family members and relatives also influence the utilisation of services. As women are not in control of resources especially, they are unable to decide when to seek services when pregnant. Resources are owned by men especially and they make decisions as to when women could seek service (Greenspan et al., 2019; Mkandawire & Hendriks, 2018). Evidence show that the late utilisation of services could affect health outcomes

negatively (Sumankuuro, Mahama, Crockett, Wang, & Young, 2019; Zhao et al., 2020). There is the need to educate men and other key family members such as mothers-in-law on the need to use facilities early when women become pregnant and at childbirth.

Strengths and limitations of the study

The study involved IDIs with key directors of the Ghana Health Service and facility managers who are well versed with the operational challenges of service use and delivery in the country. Thus the study provides important information for the improvement of service provision and usage, for the reduction of maternal deaths. However, the study used a purposive sample of participants for the data collection. Also, the use of only 8 IDIs may not be representative of the views of similar stakeholders. Thus these should be taken into consideration when interpreting the findings.

Conclusion

The implementation of the policy promoted the use of services among women. Nonetheless, challenges existed such as limited service coverage, inadequate human resource and infrastructure, lack of drugs and equipment, lack of transport to health facilities, and influence of religious, cultural and family members. Suggestions to mitigate the challenges include the need to exclude women considered to be rich, the inclusion of family planning services, ensuring the accreditation of more private facilities, provision of a shift system for specialists to move to rural areas as well as provision of incentives for health personnel in rural areas. Health personnel were also tasked to garner the support of the general public by providing information on their challenges and to provide education on women's rights and service expectations. The provision of transport vouchers to rural women as well as alternative arrangements to be made with private transport owners were also suggested. When all these suggestions are implemented, service provision and utilisation may improve leading to the reduction of maternal deaths and contributing towards achieving universal health coverage.

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