Availability of Safe Second-Trimester Abortion Services in Health Facilities in Accra, Ghana

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Abstract

Background

Despite a liberal abortion law, access to safe second trimester abortion services in Ghana are challenging for many women. This study sought to examine providers, methods employed, cost, and other determinants of availability of second-trimester abortion services in health facilities in Accra, Ghana in 2019 to inform policy and program decisions.

Methods

A two-stage mixed quantitative and qualitative study designs were employed in the conduct of this study. The first stage was a short interaction of the mystery client with a clinical care provider to identify health facilities that provide second trimester induced abortion, the cost, and referral practices, where the facility did not have the service. The second stage was in-depth interviews of second-trimester abortion care providers and non-providers in various health facilities. For internal validity, it also explored the procedure cost, referral, and other practices at the health facilities included in the study, independent of what was captured in the mystery client survey.

Results

Second-trimester abortion services in Accra, Ghana are widely unavailable even in most facilities that provided abortion services. Referral policies and practices indicated by the service providers at various facility levels were inadequate. Criminalization of the procedure, social stigma, and fear of complications are the main factors that adversely influence the availability of second-trimester abortion in health facilities in Accra.

Conclusions

Albeit increasing demand for second-trimester abortion in health facilities in Accra, services are not readily available due to the ambiguity of the law, its interpretation, and limited flow of accurate information on providers. Policies and programs that limit access to Second-trimester abortions in Ghana are amendable to ensure safe services.

Background

Access to safe abortion care according to the World Health Organization in 1995 is a fundamental human right. As essential health care in most nations including Ghana, safe abortion services are expected to be available at high standards that are acceptable and accessible to all people within local jurisdictions. Traditionally, abortion care is divided into two: first trimester (week 1 through week 13) and

second trimester (week 14 through week 27) of pregnancy. [1] Induced abortion is a willful termination of pregnancy before the fetus becomes viable (before 28 weeks' gestation, which is approximately a fetus with birth weight less than 1000g. [2]

Worldwide, about 210 million pregnancies occur annually of which an estimated 46 million end in abortions; (36 million in developing countries and 10 million in developed countries).[3] Empirical evidence has shown that demand for second-trimester abortions is increasing across the globe. [4] [5] [6]

It is also well known that second-trimester abortions are more often associated with procedural complications that could have serious consequences for the woman than first-trimester abortions. Yet, due to varied reasons, access to second-trimester safe abortion services continues to be a challenge in many jurisdictions. [7] The reasons include varied legislations, [8] cost of services, [9] inadequate flow of accurate information to service seekers and providers, [10] social stigma, [11] religious and moral values, and provider's willingness to provide second-trimester abortions. [12] [13] [14]

In Ghana, empirical evidence on the incidence of second-trimester abortions is lacking. Anecdotal evidence has shown that demand for second-trimester induced abortions from health facilities in Ghana is increasing. For reasons ranging from stigmatizing providers and abortion seekers, lack of service delivery facilities to provider bias and negative attitudes [15] [16] [17] [18, 19] there is limited published data on the availability of second-trimester abortion services to guide decision making to effectively address the increasing demand.

Aim of the study

In this study, we accessed the availability of second-trimester induced abortion services in Accra Metropolis, Ghana in 2019. This study would build local evidence that might inform the review of national and local policy and program decisions on the improvement of safe abortion care in Ghana. The findings would also be useful in planning further studies in this important but rarely investigated aspect of reproductive health in Ghana.

Summary of the existing literature

All over the world seeking and providing second-trimester induced abortions are more challenging than first-trimester abortions because of targeted legislation that imposes limits on gestational age that restrict abortion access in many jurisdictions. [2] There are also moral dimensions to late or second trimester terminations with the use of terms such as "partial-birth abortion" and "born-alive abortion".

Induced abortion has been criminalized in Ghana since the development of the criminal code, Act 29 of 1960. However, Ghana relaxed her abortion law in 1985, to make abortion legal under broadly defined circumstances that culminated in the development of national policy, standards, and protocols to improve access to care to reduce abortion-related maternal morbidity and mortality in the country. [20] Indeed, Ghana is one of the few countries in Africa with liberal abortion laws that permit induced abortion

up to 28 weeks of gestation. [20][21] Other Countries such as South Africa legalized induced abortion in 1996, and designated 292 facilities Nationally to ensure women's access to termination of pregnancy. Three years after the law was passed (In 1999), only 32 percent were functioning [22] Ethiopia reformed its induced abortion law in 2005 to expand access to abortion services as her commitment to reducing complications from an unsafe abortion [23]

Ghana's national comprehensive abortion care policy, standards, and protocols try to optimize reproductive rights including allowing women to seek abortion care without a partner or spousal consent. [20][22] However, in many situations, there are no very clear policy guidance on where, who and how second trimester safe abortion should be provided specifically. Rather the policy is very generalized with open restrictions on where, who and how induced abortion should be provided. The closest to the restrictions on second trimester abortion is the gestation limit that the various cadre of abortion providers are allowed to provide an abortion service. The decision-making process for the second trimester induced abortion is therefore complicated by a number of factors key among which include Stigma, Cost of service, Availability of trained and qualified providers that make services not readily available and accessible to many vulnerable women in need. [24][25] It is believed that some of these factors are amenable to change to improve access to care or influence policy formulation and implementation to ensure availability and accessibility of high-quality services to enhance the promotion of reproductive rights that are fundamental to national development.

Since the landmark commitments made by various political leaders at the International Conference on Population and Development (ICPD) in Cairo, 1994, [26, 27] issues relating to accessing safe induced abortion services remain public health and a reproductive right challenge among many nations worldwide.[28, 29, 30] Whilst many nations have successfully made policy and program decisions to minimize first-trimester abortion-related deaths and illness, availability and access to second-trimester abortion remain inadequate amidst increasing demand for the service, particularly in the developing world. [31]

A number of factors contribute to the demand for second-trimester abortion. These include law and policy environment, moral and cultural issues, health services infrastructure, human resources, and service delivery standards and protocols. [29] Second-trimester abortions are riskier than first-trimester ones. For good outcomes, second-trimester abortions require a more comprehensive service delivery set-up, including blood transfusion, operation theatre with facilities for emergency surgery, referral, and transport, well-resourced referral destination. These are often not available in rural and less developed settings. The inadequate availability of the services has been compounded by the lack of reliable data on the demand and availability of second-trimester abortion services at both the national and international levels for comprehensive planning. [30]

In 2006, the Government of Ghana, in partnership with other organizations, launched the Reducing Maternal Mortality and Morbidity (R3M) program in seven districts within the Greater Accra, Ashanti, and

Eastern regions, to improve comprehensive abortion care services [31] as permitted by the Ghanaian abortion law. [20] With regards to Second trimester abortions, the R3M project focused on Capacity building of medical officers, infrastructure development and supply of medical equipment in teaching hospitals and selected public hospitals in the project area in Ghana. Ten years after the implementation of the R3M project and other interventions including advanced training of reproductive health fellows in Ghana, the nation has recorded a decline in abortion-related deaths and illness in the project implementation regions.[32] It is prudent to examine the availability and accessibility of safe second trimester induced abortion services across the various health care delivery sectors in Accra, Ghana, to put in intervention to improve access to care.

Methods

Study design

A mixed method study design (quantitative and qualitative) was employed in the conduct of this study. The study was designed as a two-stage survey to capture quantitative and qualitative data. The first stage was a mystery client survey designed to enable an interaction between mystery clients and clinical care providers using a simple memorized questionnaire to identify health facilities that provide second-trimester abortion and the cost of the services. Where the facility did not have the service, the survey was to assess the referral practice.

The second stage of the study was a qualitative survey using an in-depth interview guide to solicit information from health care professionals (abortion care providers) in health facilities that had and those that did not have second-trimester abortion services. This phase of the study targeted obtaining data independent of what the mystery clients obtained. This simple approach of triangulation would produce reliable data on the cost of service and referral practices of these essential health care providers. The qualitative approach also explored reasons for provider choices regarding second-trimester abortion care practices at various health facilities studied.

Setting and Population

The study populations were healthcare professionals who provide clinical care for abortion care seekers at various health facilities that were well known for providing induced abortion services in Accra, Ghana.

Inclusion/ Exclusion Criteria

Facilities included in the study were public and private hospitals, private clinics, maternity homes, and reproductive health centers run by non-governmental organizations (NGOs) that are known in the local communities of Accra as abortion care providers. Other facilities included in the study were pharmacy and over-the-counter drug seller shops in the community with attendants who sell and/or dispense medications used for induced abortion. Although these outlets are not legally approved sources of safe abortion care, anecdotal evidence shows that these facilities offer various forms of abortion care illegally.

Hence were included to explore the situation in such facilities. Teaching hospitals were excluded from the study because they are, by policy, to provide only referral services which, do not include uncomplicated induced abortion care. Participation in this study was voluntary; health workers who were hostile and unwelcoming to the request for participation in the survey on abortion were left out of the study.

Sampling and Selection of participants

No study has been found that estimated availability of second trimester induced abortion care in health facilities in Ghana. Hence, the proportion of abortion care provider health facilities that offer second-trimester induced abortion in a community in Ghana, the main objective of this study is not known. In sample size determination a snowballing approach was used to identify 155 facilities that provided induced abortion care within the community under study. Assuming 50% of the facilities provided second-trimester abortion care; at 80% power and 95% confidence interval of error, a sample size of 52 with 10% margin was estimated using StatCalc program of EpiInfo, version 7. From the list of 155 facilities identified to provide induced abortion services, 50 were randomly selected using the assigned serial numbers that were picked one after the other without replacement to constitute a set of facilities for the conduct of the survey.

For data collection, five females aged twenty to thirty-five years and of varying backgrounds were purposively selected as mystery clients seeking second-trimester abortion care. They were given a one-day orientation including faking a pregnancy. Based on the outcome of the mystery client survey, a follow-up purposive sampling was done to select eighteen second-trimester abortion providers from the identified facilities providing second-trimester abortions to solicit their views on demand and availability for second-trimester abortion services in their respective facilities. For more balanced views, abortion care providers care from health facilities where second-trimester abortions are not available were also selected to participate in the qualitative survey. Recruitment continued to point of saturation. Health care professionals included in the survey were medical officers and midwives working in public and private health facilities, pharmacists, and chemists. Only health care facilities with abortion care providers who voluntarily and willingly offered to be interviewed to solicit their views on second-trimester abortion services in their respective facilities were recruited to participate in the in-depth interview.

Data collection tool

Both qualitative and semi-quantitative data were collected using an interview guide and a questionnaire respectively. The data collection instruments were developed from literature review by the authors. The questionnaire captured data on facility type, availability of second-trimester abortion, cost of second trimester abortion, and type of referral offered. The interview guide focused on facility type, kind of provider, level of training, years of experience/service, providers knowledge on second trimester abortion practices including components of safe second trimester abortion care, methods used, referral practices, as well as reasons for second trimester abortion choices.

Data collection procedure

Data were collected between January and November 2019. With prior appointment, each selected health facility was visited by trained research assistants. At each selected facility a lead abortion care provider at post on the day of the visit was contacted and the purpose of the study and informed consent obtained after interviews are conducted. All the five field assistants were oriented on various provider behaviours and reactions to requesting for second-trimester induced abortion in a sensitive cultural environment before the fieldwork. All interviews were done face to face in English and each one lasted for 30-45minutes.

In the first phase of the survey, the recruited mystery clients visited the selected clinics in pairs. They went through the facility reception and made a request to see the abortion provider. During the interaction, they made a request for the termination of pregnancy at about four to five months and wait for provider response regarding availability and cost. If provider indicate non-availability, the mystery requests referral help. Responses are well noted and the data capture form completed soon after leaving the facility. On return from the field, the mystery clients had debriefing or interview sessions with the principal investigator when the mystery clients filed the data capture form with indication of observations and experiences in the facility visited.

In the second stage, the interviews were conducted in private serene environments after assuring participants of confidentiality of the information collected and securing informed consent. The in-depth interviews were digitally recorded and field notes were also taken.

Data Analysis

The quantitative data captured were entered in Microsoft Excel and analyzed using SPSS version 18 using a semi-quantitative approach and the results shown in appropriate tables. The recorded qualitative data were transcribed verbatim. The transcripts were thoroughly read several times to identify the main and sub-themes that were coded and recoded for thorough analysis. The findings were presented under sub-headings and supported with direct quotations from responses of participants, where applicable.

Ethical considerations

The mystery clients used in the study participated voluntarily. The facilities visited and participants in the study were coded during data collection and processing to ensure anonymity. The Ghana Health Service gave ethical approval for the study (GHS-ERC: 02/09/2016). Participation was free and voluntary, and respondents were allowed to decline the interview at any time. Considering the sensitive nature of abortion and the study objectives, only providers or key informants who were receptive to the request for participation were engaged in the in-depth interviews.

Results

In this study, the authors sought to identify health facilities, care providers, methods employed, the cost, and other determinants of the availability of second trimester abortion care in Accra, Ghana. Table 1 shows findings from the mystery survey. The estimated sample size was 52. However, two facilities

declined to continue with the study hence were excluded in the analysis leaving 50 health facilities to be included in the analysis. The facilities studied comprised five (5) reproductive centers (clinics) run by NGOs, seven (7) public hospitals, three (3) quasi-governmental hospitals, nine (9) private hospitals, eleven (11) maternity homes, five (5) private clinics, five (5) pharmacy and five (5) over-the-counter drug seller shops. Thus, 19 hospitals and 21 clinics and 10 pharmacy or chemical seller shops were studied in the first stage.

Table 1
Second-trimester abortion (STA) availability at health facilities in Accra, Ghana

Facility type and level of care	STA available			Cost limits in GHS*	
	Yes	No	Total	Lower	Upper
Hospitals (n=19)					
- Private	4	5	9	1000	3000
- Public	0	7	7	N/A	N/A
- Quasi-governmental	0	3	3	N/A	N/A
Clinics (n=21)					
- Private Clinic	2	3	5	500	2500
- NGO clinic	0	5	5	N/A	N/A
- Maternity home	6	5	11	500	2000
Pharmacy shops	3	2	5	300	600
Over-the-counter drug seller shops	3	2	5	300	450
Total	**18**	**32**	**50**		
N/A=None Applicable *5.5 GHS = 1$ USD					

Type of healthcare facility providing second trimester abortion

Of the 50 health facilities explored our mystery abortion care seekers identified 18 facilities that provided second-trimester abortions whilst 32 did not. All abortion care providers in the ten public hospitals including quasi-governmental hospitals indicated not providing second-trimester abortion care while four out of nine private hospitals provided the service. Regarding clinics, all providers from reproductive health centers (clinics) run by non-governmental organizations stated not providing second-trimester abortions while two out of five and six of 11 from private clinics and maternity homes provided the service respectively. Similarly, six of 10 pharmacy and chemical seller shops surveyed provided second trimester

abortion care (Table 1). In summary, whereas second-trimester abortion care was not available in public health hospitals, some private hospitals, clinics, pharmacy and chemical shops provided the service.

Types of healthcare professionals providing second-trimester abortion

Table 2 shows the background characteristics of respondents who participated in the in-depth interviews. With respect to healthcare professionals who provided second-trimester terminations, an in-depth interview of 18 providers and 5 non-providers of second-trimester abortion revealed that physicians, midwives, pharmacists, and over the counter drug sellers were involved.

Table 2
Second-trimester abortion care facilities, provider characteristics, and practices

Background Characteristics	Frequency
Type of facility	
- Public hospital	5
- Private hospital	1
- Private clinic	2
- Maternity home	12
- NGO Clinic	5
Cadre of Abortion provider	
- Pharmacy/chemical seller	4
- Medical officers	3
- Midwives	16
- Pharmacists	2
- Chemical shop attendants	2
STA Training Background	
- On the Job training	6
- Trained by an NGO after school	8
- Trained by GHS/MOH after school	5
- Trained in school	4
Experience in providing STA	
- <1 year	0
- 1-3 years	4
- 4-6 years	7
- >6 years	12
Referral destinations for STA	
- Private hospital	24
- No dedicated referral facility	7

Source: Field Data 2019

Background Characteristics	Frequency
- Public hospital	0
Type of referral for STA	
- Verbal referral	21
- Written referral	3
- No referral done	8
Total	23
Source: Field Data 2019	

In the second stage of the study, three medical officers, twelve midwives, two pharmacists, and two over-the-counter drug seller shops from identified facilities that indicated to be providing second trimester abortions. The 23 various cadres of abortion care providers who voluntarily and willingly offered to be interviewed to solicit their views on demand and clients' reasons for second-trimester abortion practices in their respective facilities were included in the in-depth interview.

Demand for second trimester abortion care

The study participants indicated the existence of high and desperate demand for second-trimester terminations by a range of women in need. *It's a pity many women in Ghana are looking for a place to have an abortion at advanced gestations (midwife, maternity home); ...different kinds of people come to us looking for some drugs for an abortion (Pharmacists).* Similarly, a private physician and a midwife indicated; *daily people walk in here requesting second-trimester termination (Medical officer, Private hospital); since the demand keeps increasing, we are considering starting soon (Midwife, Private hospital).*

The findings further indicated that second-trimester abortion care seekers show features of stress and desperation at various healthcare facilities where they presented to find a solution to the unwanted pregnancy. …*They always come crying that they didn't know they were pregnant until this late (midwife, public hospital).*

The choice of provider could be influenced by the premium on offering the service. Some may not recognize the exigency to help provide the needed care. *Yes, women come here requesting second-trimester abortion services, but, providing second-trimester abortion services is not our priority for now since we are very busy with other services (Medical officer, Quasi-governmental Hospital).*

Desperation and helplessness are associated with a need for abortion. Some participants indicated concerns about the worry and extreme anxiety that the abortion care seekers exhibit when they visit their

facilities; *Some are so desperate that if we tell them we can't help them, their mood changes and some even start to cry like babies begging us to help them at all cost, so we sell the abortion pills to them. (Pharmacists)*

Factors influencing the availability of second-trimester abortion services

In this study a number of factors that influence the availability of second-trimester abortion services in Accra metropolis were identified as follows.

Legal and policy concerns

First and second-trimester terminations are not differentiated in the Criminal Offences Act and mention is only made of termination before the period of gestation is completed. The results show that the lack of knowledge of the legally acceptable gestational limit and fear of legal consequences in providing a second-trimester abortion are factors influencing availability of second-trimester abortion services. Some midwives were of the opinion that they have been trained to perform abortion up to 12 weeks only *…. It's unfortunate we see them but we can't help since it is only, we the midwives who have been recruited and trained to provide abortion up to 12 weeks here (Midwife).*

The providers were not sure of the legality of providing second-trimester abortions in Ghana. Some think that by providing second-trimester abortion the provider could face disciplinary action that could result in withdrawal of their professional license to practice or even face prosecution with potential imprisonment. Consistent with this opinion, a midwife working at a reproductive health center run by a non-governmental organization also indicated...*I will not risk my professional licenses or go to jail by trying second-trimester abortion although I know how to do it and can even do it better than a gynecologist (midwife, NGO facility).*

Some providers, though aware of the legal and professional limitation and potential legal consequence, they however exhibited some determination to provide the service: *I know what I'm doing is illegal though, but I only sell the pill out to people that I believe will not put me into any trouble (*over-the-counter drug seller*).* Another provider indicated: *Generally, we in the government hospitals provide only first-trimester abortion at the family planning unit…but after options counseling fails, I risk to induce them and ask them to return when bleeding starts……. (Midwife, public hospital).*

Based on providers' level of understanding and interpretation of the abortion law, some participants used the law to explain their non-performance of second-trimester abortion practices; *...this facility provides abortion services as mandated by the law. We believe that, although abortion is legal in Ghana, the law frowns on providing abortion above 12 weeks of gestation hence, we do not perform such services (Midwife, NGO facility).* Similarly, another midwife indicated: *the abortion law does not permit my facility to go above 12 weeks so I will never do anything that will send me to jail... (Midwife, maternity home).*

Some providers although aware of professional and other limitations, think there is a need to assist abortion care seekers; *…we are not supposed to stock or sell abortion drugs in the chemical shop, but sometimes the people we see here are so helpless that I have just kept a few stocks to help people who are very desperate so that, they don't end up going to the herbalist who will destroy their womb or kill them with herbal concoctions…. (*Over-the-counter drug seller*).*

Moral values

Moral values and the stigma associated with second-trimester abortion featured prominently during the provider interview. Some providers perform the procedure secretly; … *I know some doctors secretly do bigger gestations in the theater and at their private facilities to avoid stigma… (midwife, public hospital).* Stigma may arise from unexpected complications, ---- m*y boss encountered serious complications in the past that dented his image in the community, hence has decided not to invest in second-trimester abortions any longer (Medical officer, Private hospital).* Some forced their values on clients: ----*I don't believe in providing second-trimester abortion; so I advise them to give birth and sometimes also put fear in them so they don't do it (Midwife, public facility).*

Safety of second-trimester terminations

There was a general fear of complications associated with second-trimester terminations throughout the interview. For instance, ----*we have a big and well-equipped facility here that provides specialist obstetrics and gynecological services, but we limit our abortion services to the first-trimester because it's safer. (Medical officer, Private hospital). Another indicated: 'to have my peace of mind, I would prefer referring my clients to a facility where they can have a safe abortion' (Chemical seller).*

Cost as a deciding factor

The study has established cost as a deciding factor for accessing second-trimester abortion in 18 of 20 health facilities as shown in Table 1. The table also shows the second-trimester abortion methods available at various health facilities and the corresponding cost. While hospitals, clinics and maternity homes provide both medication and surgical second-trimester abortion care, pharmacy and over-the-counter drug seller shops, herein referred to as chemical shops provide medication only method. The cost varied with the type of health facility and the healthcare professional providing the service.

For hospitals in the study, the cost of a second-trimester abortion in Ghana cedis (GHS) was between GHS 1000.00 ($ USD 182) and GHS 3000.00 ($ USD 546). Most maternity homes charged procedure fee of GHS 500.00 ($ USD 91) and Ghs800.00 ($ USD 146) while the Clinics charge procedure fees between GHS 2000.00 ($ USD 364) and GHS 2500.00 ($ USD 456). Pharmacy and chemical seller shops were the least expensive health facility to seek the second-trimester termination; these facilities charged between GHS 300.00 ($ USD 55) and GHS 600.00 ($ USD 109).

Safety, expected cost of the procedure, perceived socioeconomic status of the client, and her ability to pay, were important considerations of providers in making choices for referral of care seekers that present at their health facilities; *I would have preferred referring my clients to a place where they can have a safe*

abortion at a cheaper cost, but the hospitals in this area are very expensive; because they can't afford their services, I sell the abortion pills to them at a cheaper price (Chemical shop attendant).

Methods of abortion and cadre of providers in health facilities

The provider cadre and methods used for the termination was a key determinant in accessing a second-trimester abortion from a facility. Although we observed a mixed method of abortion with a varying cadre of providers across the various health facilities (Table 2), there was a general misconception that medication abortions were only available in the pharmacist and Over-the-counter drug sellers' shops.

Respondents were of the view that to avoid the surgical method of termination which is perceived invasive and for that matter more dangerous, some clients would opt to visit the pharmacist or Over-the-counter drug sellers for medication abortion. A respondent explained that……*the majority of our clients express fear of D&C hence they come to us requesting for medications to have a termination…. (*Over-the-counter drug seller).

Health facility infrastructural need

The need for good infrastructure support for inpatient care has been clearly indicated by the trained providers in the study *…unlike abortion in the first trimester, we usually admit our clients to the hospital during second-trimester termination and discharge them home only when we are very sure they are fit to go (Midwife, maternity home).*

Some participants stated that, the nature and set up of the health facility sometimes limit the capacity and the ability of seemingly competent providers to handle second-trimester abortions: *we have two locum medical officers who provide specialist obstetrics and gynecological services including abortion services weekly when we book clients. They have advised us to expand our facility and equip it to run 24-hour services so they can introduce second-trimester abortion services (Midwife, Private hospital).*

Human resource challenges

The provider skills and lack of support was another concern as a respondent indicated: ––-'m*y former medical director who used to support us anytime there is a complication or police case during service delivery is no more and those in-charge now don't even care much about us, so you are on your own if something happens' (midwife, NGO facility).*

Type of provider

Whereas the medical officers, nurses, and midwives were reported providing second-trimester abortions in a clinical environment, the pharmacists and chemical shop attendants dispense abortion pills 'over-the-counter' to very desperate clients and those whom they perceive as not spies on them. A respondent indicated that: *—Just to help our clients, I sell some medications to them and give them directions on how*

it should be used when they get home……. It is a very risky thing to do because some of them bleed badly and they end up in the hospital…… (Pharmacists).

Providers indicate the need for teamwork in carrying out second-trimester termination: *Our second-trimester abortion services are initiated by our specialist and the nurses are asked to monitor the client until the pregnancy is terminated…. Sometimes we the nurses do everything and only call in the doctors if there is a complication. (Nurse, private hospital).*

Missed opportunity

There were some missed opportunities to integrate second-trimester abortion services into the service mix at some health facilities. *-----'We have a big and well-equipped facility here that provides specialist obstetrics and gynecological services including first-trimester abortion, but my boss, does not want to hear anything relating to second-trimester terminations…….and will not invest in it' (Medical officer, public hospital)*

Referral systems for second-trimester abortion

Various referral systems were observed across the facilities that do not offer second-trimester abortion services. Predominantly the private facilities were the main destinations for the referrals (Table 2).

There were many reasons/justifications for the private facilities being the key destinations for the second-trimester abortion. Some of which includes:

Poor treatment vs referral and care-seeking facility choices

Some study participants, particularly those from private clinics were of the opinion that abortion care seekers do not receive fair treatment in public hospitals. Thus, mid-level providers prefer private to public hospitals in referring their clients who need hospital or physician attention. In explaining referral facility choice, a midwife indicated that, '……*we refer them to a private hospital that we collaborate with to help because the public hospitals that we know don't treat our clients well as most of the time they humiliate them and drive them away to go and give birth' (Midwife, NGO facility).*

Awareness of limitations and referral

Abortion care providers are aware of the potential complication of second-trimester abortion but have different approaches to mitigating the challenge. Some are not willing to assist second-trimester abortion care seeker even with referrals*….. I limit myself to only the first trimester; I don't refer clients seeking second-trimester abortion services to avoid possible complications they may suffer (Midwife, public facility).*

Some held contrary views and are more sympathetic. *…although I have a conscientious objection to second-trimester abortion, I believe that if we don't do it, some quacks will do it unsafely and the complications will come back to me so 1 try to refer the clients to a place where I'm sure they can have*

safe services' (Midwife, maternity home). Another provider indicated *'…we refer our clients to sister private hospitals where we know the service is provided' (Midwife, Private hospital).*

Some think the services should be limited to physicians ---*'. Second-trimester abortion should only be done in a specialist facility and by a trained medical officer; so, it is very dangerous and criminal for it to be done outside a well-resourced hospital by a non-medical practitioner' (Medical officer, private hospital).*

Discussion

Second-trimester abortions have been noted to have disproportionately contributed to increased maternal morbidity, mortality and medical cost, compared to the first trimester abortions in developing countries.[33] In this current study, the authors sought to examine providers, methods employed, cost, and other determinants of availability of second-trimester abortion services in health facilities in Accra, Ghana in 2019 to inform policy and program decisions. Generally observed, Safe second-trimester abortion services are scarcely available within health facilities in Accra metropolis, as most of the health facilities that offer this service are privately owned clinics, maternity homes, pharmacies, and chemical seller shops that are not mandated by the abortion policies and laws.

The cost of services varied with age of gestation, and level of facility, and cadre of provider. It ranged between GHS 300 ($ USD 55) in over-the-counter facilities and GHS 3,000 ($ USD 546) in private hospitals and clinics. Obviously, this level of the cost could be beyond the affordability of the average woman in Ghana, particularly poor rural women who may be in need under varied circumstances and found in this study. This is consistent with the narrations of the chemical seller shop attendants in the study, who clearly indicated cost as the main reason for the helplessness of some women seeking care at their facilities. This finding supports the scale-up of medication abortion alongside existing surgical abortion services as documented in South Africa. [34] In this regard, Women seeking abortion can be offered a choice of methods, including medication abortion with Manual Vacuum Aspiration as a back-up, without increasing costs. This observation however implies that previous interventions by the government of Ghana and development partners to improve access to safe abortion services have not had the desired results [19, 31, 35,] Thus, there is a need to consider other initiatives for increasing access to safe abortion care including second-trimester services as permitted by the Ghanaian law.

The various factors identified to be associated with the limited availability of second-trimester abortion services in Ghana remain the same as those that hitherto restricted access to safe abortion services before previous interventions including the introduction of the R3M and international family planning fellowship projects.[34, 36] As found in this study, accessing safe second-trimester abortions has been linked to inadequate knowledge of the law including gestational age limit and fear of legal consequences of providing a second-trimester abortion in Ghana.[28, 35] Other factors found in this study; (social stigma, local policy of health facilities, provider moral values on the provision of second-trimester abortion) have all been well documented factors in previous abortion studies that influence access to abortion care locally and internationally. [29, 30, 32] Similarly, the nature of the facility, the clinical setup, provider training

and skills, as well as a general fear of complications associated with second-trimester terminations are recognized factors in this current study that have also been documented by earlier abortion studies in Ghana [16, 19, 35] to have influenced access and outcome of abortion as clinical care. Nonetheless, most of these factors are changeable to improve access to safe second-trimester abortion.

The persistence of these factors has over the years prevented even legally qualified competent clinicians to provide safe second-trimester abortion services in Ghana. [36, 37, 38] Consequently, creating the enabling environment for safe induced abortion to avert abortion-related deaths and injuries remains a public health crisis that violates reproductive rights including the dignity of women. In this current study it has been observed that many women and girls in Ghana are compelled to carry pregnancies to term against their will because they lack access to second-trimester termination or could not afford the high cost of such services even where they are available or resort to unsafe abortion providers (Chemical sellers and pharmacist) for support.

Various cadre of service providers (Medical officers, Midwives, Pharmacists, Nurses, and Chemical shop attendants) were noted in the identified facilities that provide second-trimester terminations. The observation that regardless, of the facility type, midwives constitute the majority of providers is in line with the task-sharing policy of the country but not consistent with the national protocols. This together with the continued use of services of pharmacists and chemical shop attendants who were by the protocols not permitted to provide abortion care suggests inadequate access to appropriately trained providers.

The Ghanaian abortion law [20] and various abortion care standards and protocols [37, 38,39,40] clearly state the cadre of health workers mandated to provide safe abortion services in Ghana. These legal and policy provisions also stipulate the environment considered safe for an abortion service to be done. Basing this framework on the World Health Organization's (WHO) definition of unsafe abortion (i.e 'a procedure for terminating a pregnancy performed by persons lacking the necessary skills or in an environment, not in conformity with minimal medical standards, or both), [41] and 1992 WHO Technical Consultation report, [42] the observation made so far could be interpreted as second-trimester abortion seekers are receiving unsafe abortions from pharmacies, chemical shops, and private clinics operated by pharmacists, chemical shop attendants and nurses respectively although WHO guidelines have recommended medication abortion using mifepristone and misoprostol or misoprostol alone as safe. [40]. The observation that abortion services although done undercover are available in chemical and pharmacy shops at no gestational limits, makes the outcome of second-trimester induced abortions difficult to measure since they might be underreported or misclassified by both the abortion seeker and provider at the community and facility levels.

The findings that the pharmacists and the chemical seller shops did not indicate a limit of gestational age reveals the deficiency in the policy, standards, and protocols that excluded them from training in abortion care provision. Clearly, the midwives recognize their professional limitation whereas the untrained chemical seller provides the procedure at any gestation although not completely oblivious of

the dangers and the consequences of their actions. We hereby indicate that the inclusion and training of other health care providers in the national CAC protocol will not only increase access to care but minimize the incidence and severity of complications. For such key peripheral care would be able to make timely referrals to public and private hospitals and clinics without fear of prosecution that is rarely done anyway. Additionally, their training will promote the flow of accurate information which is fundamental to improving access to self-managed abortion the most likely global approach to reducing the impact of social stigma and other accessibility factors that negatively affect outcomes of unwanted pregnancy management. However, legal and moral challenges need to be explored in comprehensive local stakeholder surveys, considering the limited availability of research work on second-trimester abortions.

Conclusion

Despite a liberal abortion law, access to safe second trimester abortion services in Ghana are challenging for many women. Although the demand is high, safe second-trimester abortion services including referral are not widely available in well-known hospitals that provide abortion care in Accra. This poses a public health challenge to reducing associated maternal morbidity and mortality. There is a need for strategic planning for public health education on the abortion law and the availability of safe abortion services to reduce the need for late abortion. The Ghana Health Services should also equip its facilities and build adequate human resource capacities for ensuring the provision of safe second-trimester abortion services when necessary. More research is required to explore why women delay till the second-trimester before seeking safe abortion care.

List Of Abbreviations

CAC
Comprehensive Abortion Care
EpiInfo
Epidemiological Information
GHS
Ghana Cedis
N/A
None Applicable
NGOs
Non-Governmental Organizations
R3M
Maternal Mortality and Morbidity
STA
Second-trimester abortion
StatCalc
Statistical Calculator

USD
United States Dollar
WHO
World Health Organization

Declarations

Ethics approval and consent to participate

All participants gave both written and verbal consent to participate in the study. The Ghana Health Service gave ethical approval for the study (GHS-ERC: 02/09/2016).

Consent for publication

All participants gave both written and verbal consents individually for the publication of the research findings on one condition that their personal and institutional identities remain anonymous.

Availability of data and materials

The raw data and any material related to the study are available upon reasonable request from the corresponding author.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

We declare that we are the sole authors of this manuscript. Author one (F.Y.G) conceptualized the study and developed the draft manuscript. Author two (R.S.M) critically reviewed the manuscript and made technical inputs. Author three (E.S.K.M) analyzed the data, interpreted the results, and made further technical inputs. All three authors read and approved the manuscript before submission for publication.

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