

ORIGINAL RESEARCH ARTICLE

Why Women are dying from unsafe Abortion: Narratives of Ghanaian abortion providers

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Abstract

In Ghana, despite the availability of safe, legally permissible abortion services, high rates of morbidity and mortality from unsafe abortion persist. Through interviews with Ghanaian physicians on the front lines of abortion provision, we begin to describe major barriers to widespread safe abortion. Their stories illustrate the life-threatening impact that stigma, financial restraints, and confusion regarding abortion law have on the women of Ghana who seek abortion. They posit that the vast majority of serious abortion complications arise in the setting of clandestine or self-induced second trimester attempts, suggesting that training greater numbers of physicians to perform second trimester abortion is prerequisite to reducing maternal mortality. They also recognized that an adequate supply of abortion providers alone is a necessary but insufficient step toward reducing death from unsafe abortion. Rather, improved accessibility and cultural acceptability of abortion are integral to the actual utilization of safe services. Their insights suggest that any comprehensive plan aimed at reducing maternal mortality must consider avenues that address the multiple dimensions which influence the practice and utilization of safe abortion, especially in the second trimester. (*Afr J Reprod Health* 2013; 17[2]: 118-128).

Résumé

Au Ghana, en dépit de la disponibilité des services d'avortement sûrs et autorisés par la loi, des taux élevés de morbidité et de mortalité suite à des avortements persistent. Grâce à des entrevues avec des médecins ghanéens qui jouent un rôle important dans la dispensation de services d'avortement, nous commençons à décrire les principaux obstacles à l'avortement sans risque généralisé. Leurs histoires illustrent l'impact potentiellement mortel que la stigmatisation, les contraintes financières, et la confusion en ce qui concerne la loi sur l'avortement ont sur les femmes ghanéennes qui recherchent l'avortement. Ils postulent que la grande majorité des complications de l'avortement graves se posent dans le cadre de tentatives clandestines ou auto-induites du deuxième trimestre, ce qui suggère que la formation de plus grand nombre de médecins pour pratiquer un avortement du second trimestre est une condition préalable à la réduction de la mortalité maternelle. Ils ont également reconnu qu'un nombre suffisant des dispensateurs de services d'avortement autonomes est une étape nécessaire mais non suffisante à la réduction du décès occasionné par l'avortement dangereux. Plus exactement, une meilleure accessibilité et acceptabilité culturelle de l'avortement font partie intégrante de l'utilisation réelle des services non dangereux. Leurs points de vue donnent à penser que toute tentative globale visant à réduire la mortalité maternelle doit envisager des voies qui s'adressent aux multiples dimensions qui influencent la pratique et l'utilisation de l'avortement médicalisé, surtout dans le deuxième trimestre. (*Afr J Reprod Health* 2013; 17[2]: 118-128).

Keywords: Abortion, providers, law, access, reproductive health care

Introduction

Striking disparities in maternal mortality between developed and developing nations have been observed for decades, making it a focus of

global health policy makers for over 25 years¹. In 2000, the United Nations formally prioritized initiatives directed toward a universal reduction in death from pregnancy and pregnancy-related complications as part of the Millennium

Development Goals². In the early years of the 21st century, over 500,000 maternal deaths were reported annually, with greater than 99% of these deaths occurring in developing nations³. More recent data reflect reductions in maternal mortality worldwide (estimates now range from 302,100 – 394,300 deaths); however, hundreds of thousands of women still continue to die from causes that are largely preventable if given access to appropriate resources⁴. In Ghana, for example, a woman's lifetime risk of maternal death is 1 in 45, while in the U.S., that figure is 1 in 5,000⁵. Recently, research has begun to document that unsafe abortion is responsible for a substantial fraction of these pregnancy-related deaths⁶. In fact, some estimates in Ghana rank unsafe abortion as the leading or second-leading cause of maternal mortality in that country^{7,8}. Furthermore, as is the case for maternal mortality more generally, significant inequities in death rates from unsafe abortion exist between the developed and developing world. The case fatality rate in the US is 0.7 deaths per 100 procedures; the rate in developing countries is over 300 times greater^{9,10}. Reducing mortality and morbidity from unsafe abortion is thus integral to addressing the global pandemic of maternal mortality.

It is likely that legislative restrictions on abortion access and practice contribute to high rates of maternal mortality in some developing countries¹¹. Such restrictions can result in the unregulated provision of abortions, often in clandestine locations by untrained practitioners, consequently leading to poor health outcomes. In Ghana, a confusing legal situation exists in which, according to Ghanaian law, abortion is technically illegal, but nonetheless permitted in many circumstances. The opening lines of the public act read: "Abortion is unlawful and both the woman and anyone who abets the offence by facilitating the abortion by whatever means are guilty of an offence of causing an abortion"¹². In subsequent clauses, however, the Ghanaian legal code enumerates the many circumstances under which abortion is permitted, including rape, foetal anomaly, or in cases where "the continuance of the pregnancy would involve risk to the life of the pregnant woman or injury to her physical or mental health"^{13,14}.

Given that abortion can be justified under many circumstances for a wide range of reasons, Ghana actually has what amounts to a relatively liberal legal climate for abortion, with a remarkably low administrative burden on the part of the abortion provider. There is no imposition of a third party (e.g. another physician opinion or state-mandated administrative materials) into the decision-making process between a woman and her doctor¹³. In addition, safe abortions are routinely performed in urban centres at major hospitals and at smaller health care facilities supported by a variety of non-governmental organizations (NGOs). However, despite the distinct permissiveness of Ghanaian legal statutes and the existence of safe services, unsafe abortion still accounts for up to 30% of maternal deaths in Ghana¹⁵.

In an effort to better understand and illuminate the reproductive health and abortion services environment in Ghana, we interviewed Ghanaian physicians on the front lines of abortion provision. Through these interviews, we begin to explore the reasons women continue to die from unsafe abortion, when trained physicians and safe facilities exist to some extent, and abortion is legally defensible in nearly any circumstance. Their stories illustrate, in broad brushstrokes, some of the major barriers to widespread safe abortion and their relationship to the persistence of maternal mortality from unsafe abortion.

Methods

We undertook a qualitative, exploratory study of abortion providers in Ghana in order to gain insight into and generate hypotheses regarding the persistently high rates of maternal mortality despite the existence of safe, legal services. One author (an Obstetrics and Gynaecology faculty member) conducted open-ended interviews with four Ghanaian physicians known for their commitment to safe reproductive health services, including abortion provision, in Fall 2009. These individuals were chosen because, at the time, they constituted the entire population of individuals being trained in Ghana in a new medical subspecialty designed to address family planning issues, including full-spectrum abortion services training. As such, these physicians are key

informants and future leaders in public sector abortion care. Since this group was represented in its entirety, we did not use any specific sampling technique.

Despite constituting a small fraction of physicians providing abortion care in Ghana, the training, research, and outreach efforts of these four individuals uniquely situate them to offer insight into the barriers that both patients and providers face with regard to accessing and performing safe abortion. A ten-question, semi-structured interview guide was utilized to elicit participants' experiences about abortion morbidity and mortality and the climate surrounding the need and availability of second trimester abortion in Ghana. Specifically, each participant was asked to reflect upon the following topics: observing or managing abortion-related complications; reasons women may seek care in unsafe settings when safe care is ostensibly legal; barriers women face in accessing safe abortion; barriers physicians face in providing abortion; methods for reducing serious consequences and death from unsafe abortion in Ghana; and thoughts about second-trimester abortion availability and feasibility. These questions provided a loose framework, and interview conversations flowed into other topics as participants' responses warranted.

Interviews were conducted when the participants were in the United States for a medical conference. Each physician was independently interviewed for approximately 25 minutes, and the entire group participated in a final 40-minute focus group conversation. To maintain privacy and confidentiality, interviews were conducted in private meeting rooms. Further, identifying information was not associated with the transcribed interviews used for analysis, and all digital recordings and identifying data were kept in a separate, secure location. All interviews were transcribed and analyzed with the assistance of NVivo 8.0 (QSR International 2008). After reading interview transcripts independently, four research team members used an iterative process to develop a coding scheme. Each researcher independently coded each interview, and coding disagreements were resolved by consensus. Qualitative analysis was carried out in a collaborative manner by all authors to identify

recurrent themes within the providers' comments. Institutional Review Board approval for this study was obtained from the University of Michigan Health and Behavioural Sciences Committee, and all participants provided written consent. We did not obtain local Ghanaian ethics board approval to cover participants, as each was affiliated with a different institution and location in Ghana; additionally, interviews were conducted in the United States.

Results

Physicians reflected on a variety of themes, most prominently the differences in morbidity and mortality from second trimester abortion compared to first trimester abortion; the effects of an ambiguous abortion law for women and physician providers; and the effect of abortion stigma on women and physicians. They also identified many other barriers to safe care, including, for women, lack of privacy surrounding hospital-provided abortion services and inability to pay for services; and for physicians, lack of training and instruments for second trimester abortion.

An Important Distinction: First versus Second Trimester Abortion Complications

Interviewees described their many experiences managing complications of abortions. In general, the physicians observed that patients with serious complications as a result of abortions most frequently attempted to self-induce abortion by inserting a variety of objects or chemicals into their vagina or uterus, ingesting herbs or chemicals thought to be abortifacients, or by seeing a "quack" (their word) in a non-hospital setting, who may or may not be a physician. Of particular note, Cytotec (an abortifacient medication also known as misoprostol) has become widely available at pharmacies and chemists in Ghana without a prescription. Originally approved for treating ulcers, misoprostol is also used by health care professionals for medication abortion. However, the physicians we spoke with expressed concern that chemists have begun freely providing Cytotec to women to self-induce an abortion. Unfortunately, the improper use of Cytotec can

lead to various first trimester complications, which are detailed below. Though physicians noted that first trimester abortion complications were the most numerous, they described how second trimester abortion complications were more devastating:

Most complications, very bad complications, are in second trimester abortion. Especially with regard to uterine perforations, cervical lacerations, and abdominal viscera [internal organs], those ones are second trimester terminations. With the first trimester terminations, they are not a big problem. Because even those who go for unsafe abortion in the first trimester, they come with sepsis and incomplete abortion, which you could easily work with.

In the first trimester, complications tended to result from retained products of conception, bleeding or infection, and could be managed in the hospital by dilation and curettage, intravenous antibiotics and supportive care. However, in the second trimester, complications tended to be catastrophic and life threatening: haemorrhage, large uterine perforations, and injury to organs outside of the uterus, including bladder and bowel. These physicians observed that many women did not survive these complications, or if they survived, might require hysterectomy, thus sacrificing future fertility. One physician recalled a particularly tragic event he witnessed:

I was having ward rounds, and there was this schoolgirl, 18 years [old], brought from school... [She tried] to terminate pregnancy, about 18 weeks size. The baby died in utero, and whatever she took was toxic so she went to admission, she died.

Physicians pointed out that complications from second trimester attempts often require greater resources to manage; consequently, they felt that second trimester abortion needed to be specifically addressed in order to improve maternal mortality from unsafe abortion.

Abortion Law

Participants all noted the ambiguous nature of Ghana's abortion law. Some thought that the law confused women who sought care in unsafe,

clandestine settings because they did not realize abortion could be legally performed in a licensed public health facility. Others suggested that women do not consider the legal ramifications of abortion when they seek care. One said, "For those who [have an] unwanted pregnancy, the law is not the problem. For them, they only think about whether or not they will survive." This physician believed that women facing unintended pregnancies act out of such desperation that they will seek abortion regardless of its legal status, and often, regardless of the circumstances under which it is performed. Thus, surviving abortion was of greater concern than whether or not it was performed under lawful circumstances.

The providers also described their own and other physicians' struggles with the ambiguity of the law. For some physicians, the ambiguity of the abortion law became a source of stress and risk. While physicians have the authority to determine if a woman qualifies for a legal abortion, a physician's judgment may be challenged. Some physicians worried about the potential consequences – including fines or imprisonment – for performing an abortion that arguably does not fit the criteria delineated in the law, and thus are deemed illegal (a second-degree felony). For others, the legality of abortion is still an open question, as one physician explained: "A lot of people, in private practice in particular, engage in abortion services without keeping any records because it is a general notion among practitioners that abortion is illegal." Physicians who believe abortion is illegal might be reluctant to provide abortion services. Even physicians who understand that abortion may be performed legally "continue to hide" as a result of the wording of the law. On the other hand, one of the physicians stated that, in his experience, "the law gives [physicians] so much power." He explained that although the potential for legal sanctions exists, he only recalled two cases in which the law was tested, and no such case has ever been presented to the Ghanaian Supreme Court. In sum, these physicians described the ambiguity of Ghanaian abortion law as a double-edged sword: It can increase women's access to safe, legal abortion, but simultaneously can work as a barrier to physicians providing the service. Though physicians are extremely unlikely

to experience legal challenges, the language of the law has a chilling effect, instilling fear in some physicians who may otherwise be inclined to provide abortion services.

Abortion Stigma

For both women and physicians who know abortion can be legally performed, stigma was a notable barrier to accessing and providing safe care. Abortion is stigmatized in Ghana for a number of reasons, including the high value placed on motherhood and social sanctions against premarital sexual relationships. Importantly, influential Christian and Muslim communities serve as drivers of societal opinion on such matters. Conservative interpretations within both religious groups consider abortion immoral, though, particularly within Islam, a wide range of beliefs regarding the permissibility of abortion early in pregnancy exists. Nonetheless, strict religious interpretations and beliefs influence societal attitudes toward women seeking abortion. One physician illustrated this point, stating:

Our society is a highly religious one... we used to do elective terminations in some of our [surgical] theatres. ... Gradually, the nurses decided, 'No, we are not setting the trolley (i.e., surgical cart with instruments) for you to do [the abortion], because I go to church and [I] don't do this.'

The physicians further described the barriers that nurses' views of abortion may create for women who come to a clinic seeking a safe abortion: "...the nurses themselves turn her away...even when [abortion is] against their values, [the nurses] are supposed to at least show [the women] where they can have the service," but nurses often refused to make the necessary referral.

Due to the stigma surrounding abortion, privacy is of the utmost concern for women, and the physicians noted that this often drives women to seek abortion in clandestine settings rather than in public hospitals or clinics. As a result of limited hospital and clinic resources, patient volume is high, waiting rooms are small and crowded, and women wait for long periods of time alongside other community members. Physicians reported that women have good reason to fear that they will

lose privacy and confidentiality if they present for abortion at a public hospital. As one physician explained:

The problem with [abortion] is that the people are labelled, anyone who goes to sit on [one particular] bench outside in a very busy part of the hospital. So once they see you sitting on the bench, you're female, they say, 'Ah, she's going for abortion.'

Social consequences of obtaining an abortion may include loss of resources and public shunning. Thus, if a woman is unable to protect her identity in the public hospitals and clinics, she has a strong incentive to seek out an abortion in more remote locations. Said another, "Some doctors do it in very obscure areas and quite a number of people go there for abortions because they feel they have more privacy there than in the hospital."

Stigma associated with pregnancy outside of marriage further increases women's desire to obtain an abortion in private. One physician articulated the particular dilemma faced by young, unmarried women:

...they know that it is morally unacceptable when they get pregnant outside of marriage, [so] they don't want people to know. And when they are very young, they also hide it from their parents. So that leads a lot of people to have [an abortion] done in such a way that is... I don't know. They go to these quacks and some of them take all kinds of concoctions, they mix all kinds of things to take thinking they will cause an abortion. And those are the ones that lead to complications.

Stigma impacted physicians as well. Though Ghanaians largely regard the medical profession with high esteem, obstetricians and gynaecologists who provide abortion services experience both professional and social marginalization. One physician stated, "Nobody wants to be labelled an abortionist, and healthcare professionals generally don't want to be associated with abortion." This was illustrated in painful detail when the physicians described community gossip about the personal spending habits of physicians who were known to provide abortion – a new car or house might be considered an "abortion car" or an "abortion house," for instance. Such comments

relegate abortion providers to the ranks of morally dubious actors whose wealth is often described as blood money. This strong stigmatizing and marginalizing atmosphere could prevent physicians from providing abortions or from disclosing their abortion work to others. Stigma thus serves as a powerful deterrent to physicians obtaining training for, and ultimately providing, abortion services. Further, according to the interviewed physicians, the low standing of abortion work can lead to a belief that it is “beneath” most competent physicians. As a result, competent, well-trained physicians come to believe it is not their responsibility to provide this medical procedure.

Other Factors – Funding and Training

The physicians observed that for women, additional economic factors influence abortion care-seeking behaviours and deter women from seeking safe care in public hospitals and clinics. Although Ghana recently implemented National Health Insurance (NHI) for its citizens, coverage of abortion services is not explicitly included¹⁶. Therefore, safe abortion in a government hospital or clinic may be many times more expensive than an unregulated abortion, and thus not a feasible option for women who lack access to financial resources. However, NHI does provide for ‘miscarriage management.’ Said one physician:

A lot of people who want to have termination may not directly request a termination and the reason is because it is not covered by the health insurance. But complications of pregnancy, like incomplete abortion, are covered by insurance. So what they do is they go to a chemical service, get the Cytotec, insert it, and then the woman starts bleeding, and then they come. Now that [it is a] complication, the insurance covers it.

Another physician added: “Once she is bleeding it [becomes] an emergency and [the abortion] would be covered. But if she came in with [the pregnancy] intact ... not bleeding and so on, it would not be [an emergency].” Thus, lack of NHI funding for abortion is problematic as it encourages women to engage in unsafe practices in order to receive coverage for the health care

services they require.

Physicians also spoke about the difficulty accessing the appropriate medical equipment and training for second trimester surgical abortions. Lack of ultrasound machines, proper forceps, laminaria, and other instruments necessary to perform a safe surgical second trimester abortion prevents the provision of second trimester abortion using the safest procedures and conditions. One physician asserted that he and his colleagues are not opposed to performing surgical second trimester abortion: “It’s just that we don’t have the right instruments, equipment and so on, so induction is what most [frequently] happens.” These doctors voiced their concern that many physicians “just don’t have the skill.” They support additional training programs in abortion provision:

If there are [skilled providers] helping [women] terminate pregnancies at that state, we would save them. Otherwise the quacks could kill them. But if you have the skills, and you can terminate the pregnancy, [then] that can help reverse some of the [maternal mortality]. And the general physician can also pick up [these skills].

The physicians expressed a wish that other currently practicing physicians in various communities would pursue additional training in abortion methods. Interestingly, they also proposed offering abortion training to midwives, as they are responsible for the delivery of a large portion of women’s healthcare in Ghana, and are not restricted by law from performing such services as they often are in the United States. While the number of abortion providers in Ghana remains small, the physicians expressed optimism for the future:

The good thing is that while the numbers are still low, the young doctors that are there are very enthusiastic. And they are also involved in the comprehensive abortion care even though they are just medical officers not yet in residency training, but they are picking it up.

Discussion

The physicians we interviewed provided important insights which illuminate some of the reasons that

– despite the existence (albeit limited) of safe, legally permissible abortion in Ghana – many women experience unsafe abortions, either self-induced or at the hands of clandestine, ill-trained providers. This first cohort of post-residency physician-trainees observed that attempts at second trimester abortion account for a significant proportion of maternal mortality. While resources for accessing safe first-trimester abortions in both public and private settings have expanded in the last several years, they explained that the resources required for safe second trimester services, generally speaking, have not. For example, one of the primary family planning non-governmental organizations (NGOs) providing safe abortions in Ghana's major cities does not offer surgical abortion services in the second trimester, nor do Ghana's two major teaching hospitals. In addition to lack of sites performing second trimester procedures, these physicians noted a lack of the necessary instruments and training in the technical skills requisite to perform these procedures, a problem which is unfortunately all too common¹⁷.

However, the responses evoked during these interviews suggest that widespread safe abortion is not solely dependent upon the existence of trained, skilled physicians and facilities to provide these services – particularly second trimester services. Rather, based on these physicians' stories, we surmise that the complex interaction of financial difficulty, legal ambiguity, societal acceptance, and factors related to the privacy of abortion services significantly influences women's ability to seek safe abortion. In fact, the physicians we interviewed illustrated a landscape of barriers to safe reproductive health services which bears remarkable similarity to classic utilization frameworks in US health services research.

Penchansky and Thomas first described five critical components of health care services utilization (*availability, accessibility, accommodation, affordability and acceptability*) to underscore the importance of multiple intersecting components leading to actual service utilization¹⁸. Though first used to characterize US health services, we highlight here the ways in which this framework may help to clarify issues regarding abortion access in Ghana. Our exploratory work suggests that universal access to safe abortion in

Ghana is unlikely to be achieved without adequately addressing the affordability, accommodation, and cultural acceptability of abortion services. Further work confirming these findings may prove valuable to the formation of a culturally appropriate solution to eradicating death from unsafe abortion. While meaningful efforts are currently underway to assure competent, skilled physicians are *available* to provide safe abortion, it seems likely that equal efforts to address the affordability, accessibility, and acceptability – i.e., the cultural attitudes regarding abortion practice for both physicians who provide, and women who seek, abortion will be needed to decrease maternal mortality from unsafe abortions.

Based on these physicians' experiences, lack of affordability appears to create a significant deterrent to utilizing safe abortion services, and women with financial constraints seem to be at particular risk of adverse outcomes from self-induced or clandestine abortion. Though services are more affordable at earlier stages of pregnancy, the costs often exceed what most women are able to pay. For women seeking second trimester abortion, the physicians we spoke with asserted that most safe second trimester surgical abortion is available only through a small handful of private providers in two urban centres, and the cost for this procedure is prohibitive for many women. Currently, no national data exist on the frequency with which women present for care in the second trimester, though recent work from Accra suggests the rate of second trimester abortion in that urban area may be around 15%¹⁹. However, we lack data on what happens to the women, whose pregnancies are too advanced and thus are turned away from centres which provide only first trimester abortions, making it impossible to determine the current unmet need for second trimester abortion services.

Collecting information on the unmet need for second trimester abortion, as well as establishment of services, seems particularly pressing, given that data from other countries confirms unsafe second trimester abortion accounts for the majority of deaths from unsafe abortion worldwide. A retrospective review of maternal deaths in Benin City, Nigeria, found that 59% of abortion-related deaths occurred among women who induced their

abortion in the second trimester²⁰. A study from the Russian Federation reported that, although only 6.6% of all abortions took place in the second trimester, 76% of abortion-related deaths were among women who terminated in this period, a finding that confirmed older research in that region²¹. Only a clear understanding of various factors which delay women's ability to obtain earlier abortions, such as availability, affordability, and sufficient cultural accommodations will allow public health professionals to appropriately address these unnecessary deaths.

We observed that low cultural acceptability of abortion services – expressed most saliently as stigma against abortion – presents perhaps the most considerable barrier to safe services and to timely access. As described in Goffman's seminal work, *stigma* is “an attribute that is deeply discrediting,” and the fear of being labelled with such an attribute erects serious barriers for both women who seek, and physicians who provide, abortion²². Indeed, in Ghana, a woman who seeks abortion is “reduced in [society's] mind from a whole and usual person, to a tainted and discounted one”²².

Ghanaian society is deeply religious, and abortion stigma in Ghana can be linked to religious attitudes, including strong social disapproval of overt sexuality and shame surrounding premarital or non-procreative sex²³. Furthermore, in Ghana's patriarchal cultural system, abortion may be perceived as challenging the stability of male/female power hierarchies and relational practices²⁴. Abortion could be interpreted as an eschewal of women's proper familial and social role (motherhood), as well as a dangerous expression of women's autonomy to control reproductive timing. Thus, stigma against abortion serves to help preserve religious and patriarchal institutions and social order.

Despite the legal permissibility embedded in most interpretations of Ghanaian abortion law, there still exists confusion among both physicians and the general public regarding the legal status of abortion. Different interpretations of the broadly written law may lead to different conclusions regarding the precise circumstances under which abortion may be legally performed. This blurred line between what constitutes legal versus illegal

abortion practice may further contribute to abortion being perceived as a criminal activity. A pervasive cultural belief that abortion practice is not just morally objectionable, but in fact against the law, may bolster the degree to which abortion is stigmatized.

Given these powerful cultural and religious prohibitions, a woman may understandably choose an abortion performed secretly in unsafe conditions, rather than in a public hospital where her reputation may be placed in grave danger. This demonstrates, too, that the current *accommodations* for safe abortion provision are unsatisfactory. The physicians expressed that the public settings where women must go to obtain abortion services do not sufficiently provide the patient confidentiality or privacy that is absolutely necessary given the hostile cultural attitudes towards abortion.

The observation that stigma influences women's experience of abortion is consistent with that of Kumar et al. and others, who theorize that stigma is pervasive and impacts women through public discourse, law, institutions (like schools and churches), and in their relationships with families and friends²⁵⁻²⁷. Kumar et al. note that stigma can be internalized, giving rise to feelings of shame and self-loathing²⁵. The Ghanaian physicians' stories reveal that abortion stigma in Ghana produces these same consequences, and they perceived that stigma helps to drive women to unsafe care.

While the impact of abortion stigma on women in developing countries is somewhat better documented^{11,13,15,23,25}, the impact on physicians is rarely mentioned. However, the physicians we interviewed clearly described the ways in which the social and professional consequences of doing stigmatized work serve as an obstacle to healthcare practitioners who might wish to offer abortion care. Thus, by curtailing both access and provision, stigma is a doubly powerful impediment to safe abortion care. Researchers have described the interactions of stigma, stress, and choices for US abortion providers, resulting in marginalization within medicine and a compromised professional workforce^{26,28,29}. The physicians we spoke with described similar alienation from community and peers. It may be important for abortion providers

working in settings where abortion is highly stigmatized to have psychosocial support for performing what sociologists and others have referred to as society's "dirty work"²⁹⁻³². Previous work in the US has found that supportive networks characterized by safe space for speaking can improve physician's resilience to the negative aspects of stigma^{28,29}; the Ghanaian physicians we interviewed described that they have, in some ways, begun to develop these networks through various NGOs and professional groups. Further enrichment and development of these supportive networks may prove valuable to abortion providers working in Ghana.

Recent data have demonstrated that the prevalence of unsafe abortion worldwide is on the rise, which necessitates attention to family planning and advanced gestation abortion care as the global public health community seeks to achieve the Millennium Development Goals for reducing maternal morbidity and mortality³³. We hypothesize that improving cultural acceptability by confronting and reducing stigma may prove both the most difficult and necessary component for ultimately reducing the burden of morbidity and mortality from unsafe abortion. Because access to health care services is "no stronger than the weakest link" among the five components of utilization, such challenges must not be dismissed³⁴. It seems likely that efforts aimed to address other barriers such as financial affordability, for instance, may fall flat unless efforts to improve cultural attitudes regarding abortion, and reduce the toxicity of abortion stigma, occur simultaneously.

Our work does have limitations, most notably a small sample size. The results may represent a biased view of the current abortion climate in Ghana, as all interviewees actively participate in family planning and abortion care at academic institutions, and as such may not be generalizable to the wider population of physicians involved in abortion care, especially those in private practice. Furthermore, their experiences working with abortion may not represent the variability between different regions with regard to unmet needs. However, the interviewees are the nation's leaders in advanced abortion provision, and as such they have wide-ranging experience with the various

levels of abortion provision throughout Ghana. Thus, their insights are particularly valuable in efforts to move forward and devise appropriate strategies for reducing morbidity and mortality from unsafe abortion. In addition, their stories will prove useful in developing future research efforts to further evaluate the barriers to safe abortion care in Ghana.

Further limitations include the absence of Ghanaian women's voices. Our understanding of the barriers women face when confronted with an unintended pregnancy is limited to second-hand information from the physicians who cared for these patients. Hearing from the women themselves may have elicited additional nuances regarding the obstacles and barriers they faced. In light of these barriers, women are often reluctant to share their stories; nevertheless, other researchers have explored women's experiences to some degree. Studies aimed at highlighting the unique challenges physician providers experience in developing settings, however, largely do not exist. Thus, our work adds an important perspective to the extant literature.

Conclusions

This exploratory work suggests that current barriers to widespread safe abortion in Ghana extend beyond a lack of trained providers. We note that access to safe abortion requires not only the availability of competent providers with the requisite skills and instruments, but also that women have the resources to pay for these services, and that the stigma around abortion for both women and providers is acknowledge and addressed. It appears that many of the current accommodations for accessing safe abortion are not sufficient to protect women's identities, and thus inadvertently lead women to seek clandestine and sometimes dangerous alternatives. Moreover, the current confusion regarding the legality of abortion in Ghana further contributes to difficulties locating a safe abortion facility. The consequences of lack of access, broadly defined, are most prominent and most concerning during the second trimester.

The interviews described here call for further research to determine the full nature, extent, and consequences of abortion stigma as a driver of

unsafe abortion. They also serve to push public health professionals to evaluate and explore reproductive health services expansions from a multi-faceted perspective in which training – or availability – is not the sole measure of improvement. Based on our exploratory work, promoting efforts that legitimize abortion as a valid and necessary medical procedure (i.e. decriminalizing abortion and reducing the ambiguity of the law), assuring that women can access these services in such a way that does not jeopardize their societal value, and training the current and next generation of physicians in both the full-spectrum abortion care and skills for coping with the consequences of doing stigmatized work, may all play a role in reducing maternal mortality and morbidity from unsafe abortion. Future efforts to gather data on public perceptions about abortion, obtain better estimates of the true prevalence of maternal mortality and morbidity from unsafe abortion (especially in the second trimester), and understand the accommodations women and physicians require, will prove particularly valuable. Recent work by Mumuni and colleagues, presented during the International Conference on Family Planning, has begun to explore some of these issues in Accra, affirming the international family planning community's commitment to the importance of these questions¹⁹, and we should continue to build upon this foundation.

As described by Allan Rosenfield and Deborah Maine more than 25 years ago, in many areas of the world, maternal mortality remains a “neglected tragedy”³⁵. Unsafe abortion continues to contribute significantly to overall maternal mortality. Unfortunately, the experiences of Ghanaian physicians suggest that liberal but ambiguous laws and availability of care at public facilities are not sufficient to reduce the burden of morbidity and mortality from unsafe abortion. Addressing the issue of unsafe abortion requires that the stories these physicians tell reach a larger audience in order to mobilize sufficient political will, knowledge, and resources to explore, understand, and address all of the barriers to safe abortion care, including abortion stigma, and ultimately bolster access to safe abortion care.

Contribution of Authors

LH Harris conceived and designed the study, collected data, and contributed to drafts of the manuscript. CM Payne and MP Debbink drafted the manuscript, while JA Hassinger, LA Martin, CT Buck, and EA Steele made contributions to initial and final drafts. CM Payne, CT Buck, and EA Steele completed the data transcription and coding. All listed authors contributed to qualitative data analysis. All authors approved the manuscript for publication.

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