Exploring the relationships between stigma, social support, and abortion safety in two Sub-Saharan African settings

Onikepe Owolabi, Clémentine Rossier and the NMAS team

Short abstract

We recruited 1030 women who had obtained abortions using respondent driven sampling in Nairobi slums and rural Burkina Faso. Our objective in this study is to understand the relationship between women's perceptions of abortion stigma in their community, access to a confidante during the process, abortion safety, and self-reported morbidity.

A small proportion of women reported having a safe abortion using the most current (2022) WHO definition (8% in Nairobi and 5% in Burkina Faso). A significant proportion of women reported using either unknown pills which may have been MA (> 30% in both contexts) and/or traditional medicine (50% in Burkina Faso). 58% of women in Nairobi and 19% in Burkina Faso reported adverse physical signs after the abortion. Further analysis will estimate community stigma scores for women and explore the relationship between abortion safety, women's demographic characteristics, perceived stigma, and support received by confidants during their abortions.

Background

Although there is a clear demand for pregnancy termination(1), and abortions conducted with clinically recommended methods (surgical and medication) are safe(2), laws, policies, and stigma in many contexts continue to restrict access to safe induced abortions. Sub-Sahara Africa has the highest prevalence of unsafe abortions globally(3) and some of the most restrictive laws and conservative social norms related to abortion. In such restrictive contexts, collecting data on abortion-related indicators is extremely challenging making it hard to measure and track the circumstances under which women terminate their pregnancies and thus to objectively assess abortion safety.

A safe abortion is currently defined as a medical (medication), aspiration, or surgical abortion process that conforms to World Health Organization (WHO) guidelines (4) and thus reduces the risk of severe health outcomes. Reducing morbidity and mortality associated with unsafe abortions is a core component of the public health argument used to advocate for expanded access to safe abortion services and commodities(5). Thus, monitoring indicators derived from data on abortion safety (the process and subsequent outcomes) has been critical for researchers and advocates championing liberalization of laws and policies in restrictive contexts(6).

Research from other contexts has shown that the decision-making process regarding an unintended/unwanted pregnancy is complex and women's trajectories to abortion care are their individual characteristics, needs and context, and by the broader national including legal, policy and health system context she lives in(7). These decision-making pathways are likely to vary considerably by individual characteristics including age(8), and likely stigma(9). Indeed, some studies have shown that women's perception of abortion stigma is positively correlated with their desire for secrecy about their own abortions so that we may hypothesize that women who experience greater stigma are less likely to report their abortion(10). Although it is logical to think that stigma and people's perceptions of stigma will affect their access to care, we are unaware of quantitative research exploring the relationship between perception of stigma and the safety of abortions amongst women who have chosen to self-report their abortions. The objective of our study was to contribute to the body of quantitative evidence on abortion safety and measurement by exploring these relationships in two sites, Nairobi, and Kaya with different characteristics. Kenya and Burkina Faso where they are respectively located have restrictive abortion laws like many contexts in sub-Saharan Africa. Analyzing self-reported data provided by a relatively large sample of abortion seekers recruited using respondent-driven sampling provides us with firsthand information to understand the different ways in which individual and contextual factors interact to influence women's pathways to quality abortion care and their subsequent health outcomes. We anticipate that the insights from our study will contribute to the limited data on woman's abortion journeys in the African region.

Methods

Setting:

The study was conducted in two Health and Demographic Surveillance System (HDSS) sites- Kaya HDSS which is peri-urban and rural in Burkina Faso in West Africa; and Nairobi HDSS which is spread across two slum areas in Kenya in East Africa. In Burkina Faso, abortion is allowed in case of rape, incest, fetal impairment, to save the woman's life and health while in Kenya, abortion is allowed only when a trained health professional confirms that there is need for emergency treatment or that the life or health of the mother is threatened. In both settings, we implemented respondent driven sampling and recruited 551 women in Nairobi and 479 women in Kaya who were between ages 15 to 49 years, had an abortion in the last 3 years and lived in the study area as seeds and participants. The full details of

the overall study are published in Rossier et al 2023(11) and of our RDS study design recruitment and descriptive results are published in Zan et al 2023 (forthcoming).

Data and analysis

Data was collected from these women on all their abortions in the last 3 years. Whilst these are pregnancy terminations women are certain occurred, we are unable to verify their retrospective pregnancy and abortion reports and may thus refer to them as abortion attempts within the paper. For each abortion, we collected information on gestational age of the pregnancy when it (finally) was ended, the number of induction attempts, for each attempt all the methods used, and each time a method was cited, the provider and place of the abortion. Data on method, place and provider were collected using a "select all that apply" multiple-response question with some pre-specified response options and an option allowing for open text responses which we categorized in analysis. For this paper we analyzed data on the most recent abortion or only abortion reported by respondents (551 abortions in Kenya and 481 in Burkina Faso).

Abortion safety (process)

We describe the abortion process by method, provider, and location, and categorize safety in three groups using the most recent World Health Organization guidelines. Safe abortions include surgical abortions by trained clinicians and medication abortions by all providers (12), less safe abortions included likely MA labelled as unidentified pills by women, and least safe abortions include all other abortions.

Abortion stigma

For this analysis we measured perceived community stigma towards induced abortion within their community amongst all respondents to our survey using the community condemnation subscale of ILAS. We reworded one question positively (we changed "people think that abortion is always wrong" to "people think that abortion is sometimes good").

Abortion safety (outcomes)

We asked respondents to self-report if they had experienced any physical signs and symptoms after their abortions. Using this information, we constructed a variable to capture the likelihood women had experienced an infection after their abortion (thereafter called potential infections). Women who reported high fever lasting greater than 24 hours and severe abdominal pain and chills or rigors and shivers; or women who reported foul smelling vaginal discharge and a high fever lasting greater than 24 hours or chills, rigors, or shivers; or women who reported having an incomplete septic abortion; or women who reported sepsis were classified as having potential infections.

We also constructed an indicator for women who sought health facility care for their self-reported abortion complication in a public hospital/health facility, private hospital/clinic, or NGO clinic and called this "seeking allopathic care".

Analysis

We describe for each site (Kaya, town and villages in Burkina Faso and Nairobi, slums of the capital city) the sociodemographic characteristics of the women in our sample, support related to the abortion (disclosure about the pregnancy termination, reasons for disclosure and ability to rest whilst using the medications), summary scores for the community condemnation sub-scale of ILAS (scores could range from 1 to 5), number of abortions and number of attempts for the most recent abortion in each context, the overall safety distribution using the three classifications, the proportion of women

who reported a physical side effects, and the proportion of these who had symptoms suggestive of an infection. Thereafter we will examine the relationship between community condemnation and safety (process and outcome definitions) using chi2 tests. In addition, we will run the following ordinal logistic regressions models safety as an outcome variable and (i) stigma as the key dependent variable; safety as the outcome and (ii) a confidante to support the abortion process as the key dependent variable and (iii) a final model including stigma and confidante support as independent variables in the same model. All models will be adjusted for key sociodemographic characteristics.

Initial results

In both sites, most women attempted ending their most recent (or only) pregnancy once- 86% of the abortions in Kaya and 75% in the Nairobi slums. The self-reported gestational age of the terminated pregnancies was typically lower in Kaya (98% in the first trimester) compared with the Nairobi slums (73%) (Table 1a).

Women reported using a range of methods (Table 2), including medication abortion pills, other allopathic medicines like antibiotics, antimalarials, and contraceptives, vacuum aspiration, curettage, coffee, tea, Coca-Cola, and less distinct methods such as traditional herbs, balls and ovules, and unidentified pills they could not name that were ingested or inserted vaginally.

The most common abortion method reported in Nairobi slums was unidentified pills which we suspect may have been medication abortion for the following reasons. Indeed, the route of administration of these pills was either vaginal and/or oral, the providers were primarily trained clinicians or pharmacists similar to MA, and the overall distribution of the person and place of provision was extremely similar to what was reported for known medication abortion. In Kaya the most commonly reported method was traditional medicine or herbal preparations. The second more common method diverges as well: in Nairobi slums about 21% of women reported using only traditional medicine, whilst in Kaya it was unidentified pills (about 30%). At the other extreme, about 2% of women in Nairobi slums and 8% in Kaya reported using only innocuous methods which are not known abortifacients to terminate their pregnancies. Overall, more women in Nairobi slums reported using a known safe method for their recent or only abortions (12%) than in Kaya (5%) (Table 1b).

Table 1a: Number of attempts for most recent/only abortion, gestational age

	Nairobi slums (Kenya HDSS)		*Kaya (Burkina Faso HDSS)*	
	Freq.	*%*	*Freq.*	*%*
Number of attempts to induce most recent abortion				
One	406	73.70%	414	86.10%
Two	97	17.60%	61	12.70%
Three	39	7.10%	5	1.00%
Four	9	1.60%	1	0.20%
Total	551	100.00%	481	100.00%
Gestational age at termination for most recent abortion				
Unknown	1	0.20%	0	0
first trimester=less than 13 weeks)	404	73.30%	471	97.90%

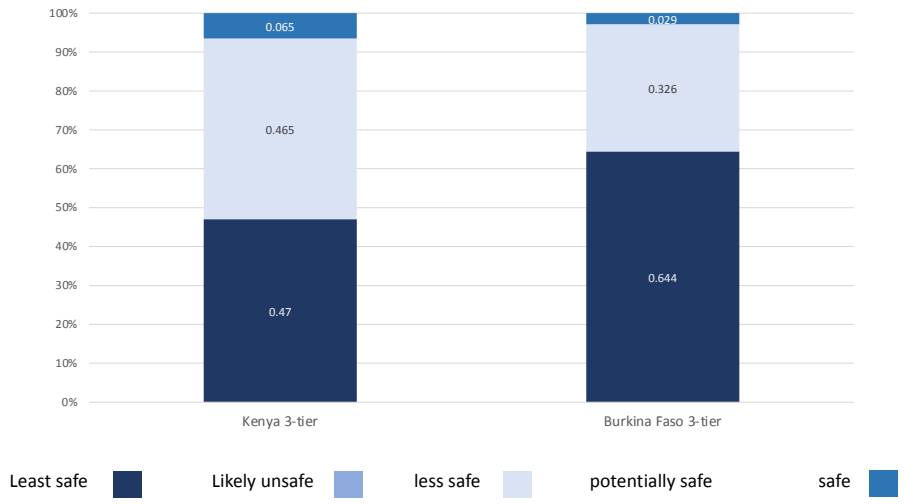
second trimester 13-21 plus weeks)	143	26.00%	10	2.10%
Third trimester >28 weeks	3	0.50%	0	0
Total	*551*	*100.00%*	*481*	*100.00%*

Table 1b: Method/provider/place for most recent abortion

	Nairobi slums (Kenya HDSS)		*Kaya (Burkina Faso HDSS)*	
	Freq.	%	Freq.	%
Summary methods used to induce abortion (most recent abortion)				
MVA only	36	6.50%	15	3.10%
MA only	24	4.40%	8	1.70%
MA/MVA with/out innocuous method	6	1.10%	0	0.00%
Unidentified pills maybe with/out safe or innocuous method	248	45.00%	149	31.00%
Innocuous beverages and foods only	13	2.40%	37	7.70%
Traditional/herbal preparations/ovules ingested	118	21.40%	254	52.80%
Known harmful methods	106	19.20%	18	3.70%
Total	551	100.00%	481	100.00%
Summary classification abortion providers (most recent abortion)				
Clinician without TBA	105	19.10%	128	26.60%
Pharmacist without TBA	232	42.10%	8	1.70%
TBA included in combination	204	37.00%	241	50.10%
Self-induced with/out friends	10	1.80%	103	21.40%
Other	0	0.00%	1	0.20%
Total	551	100.00%	481	100.00%
Summary of places where pregnancy termination was sought (most recent abortion)				
Health facility only	65	11.80%	43	8.90%
Shop/pharmacy/health facility and drugstore	80	14.50%	1	0.20%
Providers house	23	4.20%	38	7.90%
Woman/friend/relatives house	295	53.50%	381	79.20%
Combinations of many places	88	16.00%	18	3.70%
Total	551	100.00%	481	100.00%

Overall, using the WHO classification, there were more safe abortions in Kenya than in Burkina Faso. and a higher proportion of least safe abortions in Burkina Faso compared with Kenya. (Figure 1)

Figure 1: Differential distribution of safety using the original three-tiered classification and more nuanced classifications.



A smaller proportion of women with safe abortions self-reported any physical side effects compared with other groups in all three classifications, and a larger proportion of women in the Nairobi slums reported physical side effects compared with those in Kaya.

Although more women in the Nairobi site reported abortion-related side effects than in the Kaya site, a smaller proportion of women in the Nairobi slums sought any care,

Discussion points

Our results reemphasize that attempting to measure biomedical abortion safety using self-reported indicators of process particularly the method of termination is extremely challenging. Overall, the proportion of abortions conducted using recommended methods- medication abortion or MVA by a trained clinician or pharmacist was very small across all three safety classifications. That said, the inability to ascertain if unidentified pills which has a similar pattern of provision with MA and MVA and were administered orally and/or vaginally makes it challenging to empirically categorize them as safe abortions, since other non-MA medicines can be used through the same routes.

Our further analysis will provide us with useful insights into the how women's individual characteristics and contextual experiences are associated with their abortion process and subsequent outcomes.

References

1. Bearak JM, Popinchalk A, Beavin C, Ganatra B, Moller AB, Tunçalp Ö, et al. Country-specific estimates of unintended pregnancy and abortion incidence: a global comparative analysis of levels in 2015–2019. BMJ Glob Health. 2022 Mar 1;7(3):e007151.

2. Abortion care guideline. Geneva: World Health Organization, Human Reproduction Programme; 2022.

3. Ganatra B, Gerdts C, Rossier C, Johnson BR, Tunçalp Ö, Assifi A, et al. Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model. The Lancet. 2017 Nov;390(10110):2372–81.

4. Ganatra B, Tunçalp Ö, Johnston HB, Johnson Jr BR, Gülmezoglu AM, Temmerman M. From concept to measurement: operationalizing WHO's definition of unsafe abortion. Bull World Health Organ. 2014 Mar 1;92(3):155–155.

5. Fathalla MF. Safe abortion: The public health rationale. Best Pract Res Clin Obstet Gynaecol. 2020 Feb;63:2–12.

6. Faundes A, Comendant R, Dilbaz B, Jaldesa G, Leke R, Mukherjee B, et al. Preventing unsafe abortion: Achievements and challenges of a global FIGO initiative. Best Pract Res Clin Obstet Gynaecol. 2020 Jan;62:101–12.

7. Coast E, Norris AH, Moore AM, Freeman E. Trajectories of women's abortion-related care: A conceptual framework. Soc Sci Med. 2018 Mar;200:199–210.

8. Sully E, Dibaba Y, Fetters T, Blades N, Bankole A. Playing it Safe: Legal and Clandestine Abortions Among Adolescents in Ethiopia. J Adolesc Health. 2018 Jun;62(6):729–36.

9. Dahlbäck E, Maimbolwa M, Kasonka L, Bergström S, Ransjö-Arvidson AB. Unsafe Induced Abortions Among Adolescent Girls in Lusaka. Health Care Women Int. 2007 Aug 2;28(7):654–76.

10. Cowan SK. Enacted abortion stigma in the United States. Soc Sci Med. 2017 Mar;177:259–68.

11. Rossier C, Owolabi O, Kouanda S, Bangha M, Kim CR, Ganatra B, et al. Describing the safety of abortion at the population level using network-based survey approaches. Reprod Health. 2022 Dec 27;19(1):231.

12. Kim CR, Lavelanet A, Ganatra B. Enabling access to quality abortion care: WHO's Abortion Care guideline. Lancet Glob Health. 2022 Apr;10(4):e467–8.

13. Pasquier E, Owolabi OO, Fetters T, Ngbale RN, Adame Gbanzi MC, Williams T, et al. High severity of abortion complications in fragile and conflict-affected settings: a cross-sectional study in two referral hospitals in sub-Saharan Africa (AMoCo study). BMC Pregnancy Childbirth. 2023 Mar 4;23(1):143.

14. Baxerres C, Boko I, Konkobo A, Ouattara F, Guillaume A. Abortion in two francophone African countries: a study of whether women have begun to use misoprostol in Benin and Burkina Faso. Contraception. 2018 Feb;97(2):130–6.

15. Bell SO, OlaOlorun F, Shankar M, Ahmad D, Guiella G, Omoluabi E, et al. Measurement of abortion safety using community-based surveys: Findings from three countries. Nair M, editor. PLOS ONE. 2019 Nov 7;14(11):e0223146.

16. Kabakian-Khasholian T, Ataya A, Shayboub R, El-Kak F. Mode of delivery and pain during intercourse in the postpartum period: Findings from a developing country. Sex Reprod Healthc. 2015 Mar;6(1):44–7.