TITLE

Socioeconomic determinants of access to safe abortion and experiences along the care trajectory: A survey of women with a five-year abortion history in Abuja and Lagos, Nigeria.

AUTHORS

Matthea Roemer, Boniface Ayanbekongshie Ushie, Akinsewa Akiode, Ogechi Onuoha, Ochanya Idoko, Anne Taiwo.

EXTENDED ABSTRACT

Background:

Unsafe abortion remains a leading cause of maternal mortality in low- and middle-income countries, contributing to 8–15% of maternal deaths (Kassebaum 2013). Despite progress in the availability of safe abortion care and a revolution in access to quality medical abortion products over the last two decades, the prevalence of unsafe abortions remains high in Sub-Saharan Africa (Bearak 2020). Most unsafe abortions worldwide take place in legally restrictive settings where 40% (approximately 753 million) of women of reproductive age live (CRR 2024).

Nigeria has one of the most restrictive laws in the region. Induced abortions are only legally permitted to save the woman's life and when performed by qualified practitioners (WHO 2018). Previous evidence indicates that two-thirds of abortions in Nigeria are most unsafe, involving non-recommended methods (i.e., methods other than surgery or medication abortion drugs) from non-clinical providers (Bell 2019).

The primary objective of this study was to determine the safety of reported abortions in our sample and explore in-depth the determinants of experiencing an unsafe abortion, including both sociodemographic and reproductive history characteristics. An improved understanding of factors that may contribute to women accessing a less safe abortion care option in this setting can inform harm reduction efforts that seek to reduce morbidity and mortality due to unsafe abortion.

The secondary aim was to explore how the same sociodemographic and reproductive history determinants can influence abortion care-seeking trajectories, from taking a pregnancy test to experiencing any complications or having social support throughout one's abortion care pathway. While it is important to understand the social determinants of access to safe abortion, a more granular exploration of how any inequities in access may play out at different stages of one's abortion care pathway can help inform targeted harm reduction efforts and help improve access to safer, client-centred services and ultimately reduce morbidity and mortality due to unsafe abortion.

Methods:

Data presented are drawn from a larger study that was conducted in Lagos and Abuja, Nigeria in 2023. This analysis drew exclusively on data from a quantitative survey of women of reproductive age with a 5-year history of induced abortion(s). The survey employed a convenience sampling approach, targeting a purposive sample of 200 women aged 15–49 in Lagos and Abuja who had experienced at least one induced abortion in the 5-years preceding data collection, with an equal sample of 100 participants per study location. Survey participants were recruited through (1) referrals by abortion and PAC providers, (2) initial seeds found at known PAC service delivery sites, (3) peer recruiters, and (4) community health volunteer referrals. All respondents provided

written consent to participate before the beginning the survey. Interviews were conducted face-to-face by trained interviewers primarily in Hausa, Yoruba or English.

Through this survey approach, we explored several questions related to women's experiences with abortion and post-abortion care including the pathway to care, cost, incidence of complications, source of care, methods used, quality of care, stigma, and social support. In the analysis, abortion safety was operationalised based on two dimensions in line with a previous analysis of Nigeria PMA survey data (Bell 2019): (1) whether the method(s) used included any non-recommended methods and (2) whether the source(s) used were clinical or non-clinical. Analyses include frequencies of abortion safety and experiences along the abortion care trajectory and bivariate and multivariate assessments of sociodemographic and reproductive history correlates.

This study protocol was approved by MSI's independent Ethical Review Committee (application reference number: 003-23). Further, IRB approvals were also sought and received from the Federal Capital Territory Health Research Ethics Committee in Abuja (approval number: FHREC/2023/01/136/25-07-23) and Lagos State University Teaching and Hospital Health Research Ethics Committee in Lagos (approval number: LREC/06/10/2210). Informed consent was sought from all participants immediately before the commencement of the survey.

Results & Discussion:

This study describes the frequency of unsafe abortions in Lagos and Abuja, Nigeria and provides new insights into the sociodemographic correlates with women's experiences along their abortion care trajectory. Two hundred women completed the survey of which 197 reported their abortion method and were included in this analysis. Almost half of the abortions (44.7%) in our sample were unsafe, with those living in rural areas and those living in poverty at the greatest risk of having unsafe abortions. Previous use of family planning was a protective factor, with those who reported any use of family planning at the time of their most recent pregnancy that was terminated having a decreased likelihood of having an unsafe abortion. These findings are consistent with previous literature suggesting that the most disadvantaged women are those most likely to resort to unsafe means of termination (Bell 2020; Henshaw 2008; Prada 2015; Singh 2018; Ganatra 2017).

Our estimate of the proportion of unsafe abortions was also lower than the previous estimate of 63.4% in 2017 (and 73.7% from the same study for the past five years) (Bell 2020). These 2017 estimates are also lower than the unsafe abortion estimates for Western Africa in 2010–2014 at 84.7% (Ganatra 2017). This could be due to various reasons including that our sample may not be representative of the national population of women who access abortions and is likely biased towards a more affluent population. The potential bias in our sample is due to the sampling process whereby providers linked interviewers to women who had received abortion care from them. Such women are likely to have received safer care involving clinic-based providers which may not be representative of the care for the general population. However, this estimate may also be capturing that abortion is becoming safer in Nigeria.

It is probable that safe abortion options are becoming more available in Nigeria, largely due to the increased availability of medication abortion drugs (Mifepristone and Misoprostol) in recent years. Mifepristone was registered for use in 2017 and Misoprostol has been on the country's Essential Medicines List for incomplete and spontaneous abortion since 2010 (IPPF 2023). A 2018 review of referral hospital medical record data showed an increase in Misoprostol use for induced abortions over a nine-year study period, and this was associated with a reduction in severe morbidity (Bello 2018). Other studies have indicated that women increasingly have the option to self-manage their abortion by purchasing the drugs through pharmacies, chemist shops, abortion hotlines and accompaniment models (Moseson H 2020) (Stillman 2020). This trend toward out-of-facility medical management of abortion appears to have been captured in

our study as well, with 26.4% of respondents reporting using recommended methods (medical abortion) from non-clinical sources, compared to just 5.4% in 2017 (Bell 2020). We also observed a decrease in the use of recommended method(s) involving only clinical source(s) compared to the 2017 data, at 22.3% versus 29.1% (Bell 2020). This indicates that while the overall safety of abortion may be improving, there has been a shift away from clinical sources of abortion which may mean future gaps in needed access to clinical care for surgical options and management of complications.

Regarding people's preferences and experiences of care, previous evidence from the Nigerian context found that non-clinical providers (55.0%) were more often used than clinical providers (45.0%); however, clinical providers were preferred by most women (55.6%) (Byrne 2021). While, we found a lower use of clinical sources (28.4%), we saw a similar trend in preference for clinical providers, with 90.7% of those who accessed a clinical source reporting that they had accessed their preferred source compared to just 59.8% of those who had accessed non-clinical sources. We also found that those who were living in poverty had a significantly decreased likelihood of accessing their preferred source and accessing a clinical source, indicating important wealth inequities in ability to exercise choice in source of abortion and importantly in access to facility-based care. We also found that women living in poverty and severe poverty were significantly more likely to have experienced any complications (MPI poor OR: 2.55, 95% CI:1.02-6.37; MPI severe poor OR: 5.09, 95% ci: 1.87-13.84). When adjusting for other demographic covariates, severe poverty remained significantly associated with experiencing any complications, demonstrating the public health imperative of ensuring improved equitable access to safe – with options for both facility and out-of-facility - sources of care.

Conclusion:

Our study suggests that while the overall safety of abortion could have marginally improved over the last five years. However, still almost half of abortions in Lagos and Nigeria in our study were the most unsafe, with the use of non-recommended methods outside of a clinical setting. Our findings further indicate that economically disadvantaged women living in rural areas with limited ability to navigate and access safe abortion in this legally restrictive setting are most at risk of having an unsafe abortion, clearly highlighting that abortion in Nigeria is a public health concern and an issue of social inequity. Efforts to expand the legal conditions for abortion in Nigeria are critical. Previous evidence has shown that restrictive abortion laws negatively impact abortion safety without reducing overall abortion incidence rates (Ganatra 2017). In the absence of legal expansion, women will continue to seek services from providers who are not regulated and may not have appropriate training but are motivated to provide abortion for financial gain and/or to alleviate suffering associated with unwanted pregnancies or seek sub-quality products to self-manage their abortion. In the meantime, harm reduction efforts to increase awareness of quality MA drugs to self-induce more safely and/or train lower cadre providers on medical management of abortion can help mitigate the toll of abortion-related morbidity and mortality.

Additionally, improved availability of contraceptive services, including counselling to counteract fears of contraceptive-related infertility, is needed to reduce women's reliance on unsafe abortion alone to control their fertility. We found that previous use of family planning was associated with a decreased likelihood of having an unsafe abortion. This could be due to various factors such as an established, trusted connection to the health care system and specifically a sexual and reproductive health provider and thus improved access to information and knowledge about where to access a safe abortion care service.

Furthermore, expanded availability of quality, facility-based services including surgical abortion and PAC is critically needed to reduce abortion-related morbidity and mortality given the frequent recourse to unsafe abortion. Given the existing inequities in access to these services, it is essential that any future efforts focused on improving access to safe abortion services prioritise

mitigating these gaps in access to ensure that already disadvantaged women and populations do not continue to be left behind.

References:

Bearak J, Popinchalk A, Ganatra B, Moller AB, Tunçalp Ö, Beavin C, et al. 2020. “Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990–2019.” Lancet Glob Health 8(9):e1152–61.

Bell S.O., Omoluabi E, OlaOlorun F, Shankar M, Moreau C, et al. 2020. “Inequities in the incidence and safety of abortion in Nigeria.” BML Glob Health e001814.

Bell SO, Ola0lorun F, Shankar M, Ahmad D, Guiella G, Omoluabi E, et al. 2019. “Measurement of abortion safety using community-based surveys: findings from three countries.” PLoS ONE 14(11).

Bello FA, Fawole B, Oluborode B, Awowole I, Irinyenikan T, Awonuga D, et al. 2018. “Bello FA, Fawole B, Oluborode B, Awowole I, Irinyenikan T, Awonuga D, et al.” Plos ONE 13(12).

Byrne, M.E., Omoluabi, E., OlaOlorun, F.M. et al. 2021. “Determinants of women’s preferred and actual abortion provision locations in Nigeria.” Reprod Health 18, 240.

CRR, Center for Reproductive Rights. 2024. The World’s Abortion Laws. Accessed June 01, 2024. https://reproductiverights.org/maps/worlds-abortion-laws/.

Ganatra B, Gerdts C, Rossier C, Johnson, BR, Tuncalp O, Assifi A, et al. 2017. “Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model.” The Lancet 390:2372-81.

Henshaw SK, Adewole I, Singh S, Bakole A, Oye-Adreniran B, Hussain R. 2008. “Severity and cost of unsafe abortion complications treated in Nigerian hospitals.” Int Fam Plan Perspect 34:040-51.

IPPF. 2023. Medical Abortion Commodities Database. Accessed June 03, 2024. https://medab.org/.

Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, Shackelford KA, Steiner C, Heuton KR. 2013. “Global, regional, and national levels and causes of maternal mortality during 1990–2013: a systematic analysis for the Global Burden of Disease Study.” Lancet 2014;384(9947):980–1004.

Prada E, Bankole A, Onda T, Oladapo OT, Awolude AO, Adewole FI. 2015. “Maternal near-miss due to unsafe abortion and associated short-term health and socio-economic consequences in Nigeria.” Afr J Reprod Health 19: 52-62.

Singh S, Remez L, Sedgh G, Kwok L, Onda T. 2018. “Abortion worldwide 2017: uneven progress and unequal access.” Guttmacher.

Stillman M, Owolabi O, Fatusi AO, Akinyemi AI, Berry AL, Erinfolami TP, et al. 2020. “Women’s self-reported experiences using misoprostol obtained from drug sellers: a prospective cohort study in Lagos State, Nigeria.” BMJ Open 10(5).

WHO. 2018. Global Abortion Policies Database. Human Reproduction Programme - Research for impact. , Geneva: Countries Archive. Accessed May 29, 2024. https://abortion-policies.srhr.org/.