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SUPPLEMENT ARTICLE



Experiences of women seeking care for abortion complications in health facilities: Secondary analysis of the WHO Multi-Country Survey on Abortion in 11 African countries

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Funding information

UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP); Department of Reproductive Health and Research; World Health Organization

[The copyright line in this article was changed on 13 December 2021 after online publication.]

Abstract

Objective: Despite evidence of acute and long-term consequences of suboptimal experiences of care, standardized measurements across countries remain limited, particularly for postabortion care. We aimed to determine the proportion of women reporting negative experiences of care for abortion complications, identify risk factors, and assess the potential association with complication severity.

Methods: Data were sourced from the WHO Multi-Country Survey on Abortion for women who received facility-based care for abortion complications in 11 African countries. We measured women's experiences of care with eight questions from an audio computer-assisted self-interview related to respect, communication, and support. Multivariable generalized estimating equations were used for analysis.

Results: There were 2918 women in the study sample and 1821 (62%) reported at least one negative experience of postabortion care. Participants who were aged under 30 years, single, of low socioeconomic status, and economically dependent had higher odds of negative experiences. Living in West or Central Africa, rather than East Africa, was also associated with reportedly worse care. The influence of complication

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severity on experience of care appeared significant, such that women with moderate and severe complications had 12% and 40% higher odds of reporting negative experiences, respectively.

Conclusion: There were widespread reports of negative experiences of care among women receiving treatment for abortion complications in health facilities. Our findings contribute to the scant understanding of the risk factors for negative experiences of postabortion care and highlight the need to address harmful provider biases and behaviors, alleviate health system constraints, and empower women in demanding better care.

KEYWORDS

abortion complications, experience of care, quality of care, respectful care, Sub-Saharan Africa

1 | INTRODUCTION

In Africa, an estimated 8.3 million induced abortions occur annually at a rate of 34 abortions per 1000 women, accounting for 15% of pregnancies among women of reproductive age. Unsafe abortion, defined by the World Health Organization (WHO) as a procedure carried out by unskilled persons and/or in a medically inadequate environment, constituted 45% of all induced abortions between 2010 and 2014 and 13% of all maternal deaths in 2008. ²⁻⁴ The vast majority (97%) of unsafe abortions occur in low- and middle-income countries (LMICs) and the highest proportion of least safe abortions occur in Africa. ^{2,5} Unsafe abortions frequently result in complications, putting women at undue risk of long-term morbidity, infertility, and mortality, especially if care is of insufficient quality. ⁴⁻⁶

Quality of care—defined by WHO as provision and experience of care, and characterized by safe, people-centered, and respectful services—is integral to reducing adverse abortion-related outcomes.⁷ Negative experiences of care can incur acute and lasting effects, including compromised autonomy, decreased future careseeking behavior, emotional and/or physical trauma, increased catastrophic expenditure, and poor birth outcomes, including maternal and/or neonatal death.⁸ Measurement of experience of care and related concepts such as mistreatment and disrespectful care is not yet standardized. Though multiple tools have been developed for maternity care,⁹⁻¹³ few exist for abortion, underscoring the need to explore and document people's experience of postabortion care (PAC).¹⁴

Abortion legality can shape the quality of PAC. Prohibitive abortion laws put women at significantly higher risk of unsafe abortion and complications and increase likelihood of negative experience of care. ^{4,15} Plausible explanations of these relationships include limited distribution of drugs and equipment, delayed care, inadequate medical training, and utilization of methods that are not recommended, such as dilation and curettage. ¹⁶ In a systematic review of studies in 12 countries across Eastern and Southern Africa, fear of prosecution, societal stigmatization, and harassment were found to be barriers to PAC uptake. ⁶

Health system constraints and patient socioeconomic disadvantages have also been identified as drivers of negative experiences of care. Research suggests adolescents are less likely to be treated respectfully in maternity care and PAC and may delay care to avoid provider bias and discrimination. Women of low socioeconomic status (SES) were found to have increased risk of unnecessary obstetric procedures, discrimination, and stigmatization from providers. This effect was heightened when intersections with religious, ethnic, or racial minority status were considered. Facility environments can also obstruct practices; analyses of mistreatment during childbirth in Kenya found an association between facility infrastructure and observed verbal abuse, unhygienic practices, and lack of consent.

This secondary analysis of the WHO Multi-Country Survey on Abortion (WHO MCS-A) had three objectives: (1) to estimate proportions of women reporting positive and negative experience of care for abortion complications in 11 African countries; (2) to identify risk factors associated with negative experience of care; and (3) to examine the association between negative experience of care and abortion complication severity.

2 | MATERIALS AND METHODS

Data were sourced from phase one of the WHO MCS-A in Benin, Burkina Faso, Chad, the Democratic Republic of the Congo, Ghana, Kenya, Malawi, Mozambique, Niger, Nigeria, and Uganda. The study protocol has been published, detailing recruitment and collection methodologies. ^{18,19} Participating countries, provinces, and facilities were identified with multistage sampling. Facilities had the following characteristics: more than 1000 deliveries per year, a gynecology ward, and surgical capability (defined as providing the signal functions for comprehensive emergency obstetric care, which includes removal of retained products of conceptus and surgical capability and, if available, abortion provision and/or postabortion care). Data collection occurred between February 2017 and April 2018 via medical record extraction and a facility assessment, typically overseen

by coordinating obstetrician/gynecologists or midwives, and an exit survey in the form of an audio computer-assisted self-interview (ACASI). Medical records of patients with signs and symptoms consistent with complications related to spontaneous and induced abortions who presented at selected facilities were eligible for inclusion. A sample of eligible women admitted for at least 24 h were invited to participate in the ACASI at discharge after informed consent.

Experience of care was measured as a composite variable of eight questions from the ACASI.^{7,14} Dimensions were comparable to themes identified by WHO and established measures of disrespectful maternity care.^{7,11,13,14} Six of the questions were yes/no responses and two were a five-point Likert scale ranging from very satisfied to very dissatisfied, regrouped into satisfied/dissatisfied with neutral included in dissatisfied. Questions were coded such that a negative answer (i.e. no, dissatisfied) constituted a negative experience.

We categorized risk factors as sociodemographic, clinical, facility, and geopolitical. Sociodemographic factors included age group,

marital status, and highest education level, obtained from medical records, and household SES and economic independence from the ACASI. Household SES was a composite of the presence of running water in the participant's home and sufficiency of household income the previous month was to cover food, health needs, and savings. Economic independence was determined if the participants selfreported personal income and/or if the medical records indicated gainful occupation. Clinical factors from medical records included parity, diagnosis, and complication severity, defined as mild, moderate, and severe (counting severe maternal outcomes and potentially life-threatening complications). Abortion type included a combined count of self-reported and record-indicated induced abortions. Facility factors included location, level, and guidelines in use (i.e. Safe Abortion Guidance/Clinical Handbook, WHO Guidelines, evidencebased locally adapted guidelines, and clinical audits). Geopolitical factors included abortion legality, classified by the WHO Global Abortion Policies Database, and geographical region, per the United Nations geoscheme. 20,21

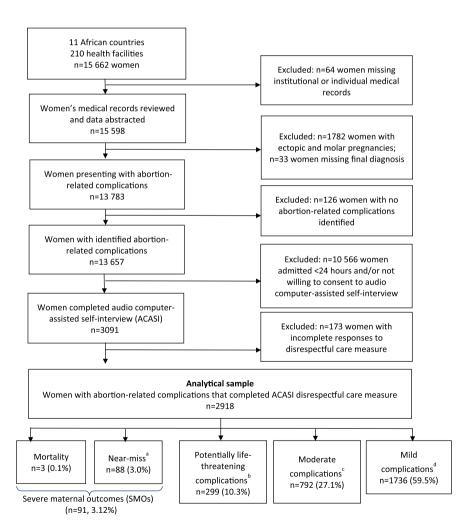


FIGURE 1 Flow diagram for inclusion and exclusion criteria for analytical sample. ^aWHO maternal near-miss criteria (organ dysfunction of either one or more of the following: cardiovascular, respiratory, renal, coagulation, hepatic, neurologic, or uterine dysfunction). ^bWHO potentially life-threatening conditions (severe hemorrhage, severe systemic infection, or suspected uterine perforation). ^cModerate complications (heavy bleeding, suspected intra-abdominal injury, or infection). ^dMild complications based on abnormal physical examination findings on initial assessment (vital signs, appearance, mental status, abdominal examination, gynecological examination)

Bivariate analyses were performed for individual-, facility-, and country-level factors, and cross-tabulated with women's negative experience of care, construed as a binary variable (i.e. yes reported for at least one negative experience versus no reports). We conducted crude analyses to assess the association of each factor with reported experiences of care, using generalized estimating equations to account for clustering by facility. Multivariate regression analyses evaluated the strength of association between each factor and reported experience of care, after adjusting for age group, household SES, and country. One-way ANOVAs were used to identify statistically significant differences in the mean number of negative care report counts within risk factors. A Tukey post-hoc test was used to determine the directionality of between-group differences.

Multiple regression determined the strength of association between complication severity and negative experience of care, of particular interest after initial analyses of the WHO MCS-A found gaps in care for the subset of women with severe complications. ¹⁹ A generalized estimating equations model was fitted, adjusting for country and any risk factor that led to a change of 10% or more in the association between complication severity and negative experience of care.

This analysis was approved by the WHO Ethical Review Committee (protocol: 0002699), the WHO Human Reproduction Programme (HRP) Review Panel on Research Projects, and the London School of Hygiene and Tropical Medicine Master of Science Research Ethics Committee (reference: 21968). Primary study approval was received from in-country ethical committees in Benin (Comité National d'Ethique pour la Recherche en Santé); Burkina Faso (Comité d'Ethique pour la Recherche en Santé); Chad (Ministère de l'Enseignement Supérieur et de la Recherche Scientifique): Democratic Republic of Congo (Comité d'Ethique de l'Ecole de Santé Publique); Ghana (Ethical Review Committee of the Ghana Health Service; Ethical and Protocol Review Committee of the College of Health Sciences, University of Ghana); Kenya (University of Nairobi Ethics and Research Committee); Malawi (College of Medicine Research Ethics Committee); Mozambique (Comité Nacional de Bioetica para e saude, Ministerio de Saude); Nigeria (Federal Capital Territory Health Research Ethics Committee; Research Ethical Review Committee, Oyo State; and State Health Research Ethics Committee of Ondo State); and Uganda (Mulago Hospital Research Committee; Uganda National Council for Science and Technology).

3 | RESULTS

The database included 15 662 women and we extracted records for 15 598 women. Of the 13 657 women who met clinical criteria for abortion-related complications, 3091 were recruited and participated in the ACASI (Figure 1). After excluding incomplete responses to the ACASI experience of care composite measure, the final analytical sample consisted of 2918 participants.

A total of 2918 participants answered all eight questions in the negative experience of care composite measure. The distribution of

responses by question is shown in Table 1. Overall, 62% (n = 1821) reported at least one incident of poor experience of care, of whom 88% (n = 1598) reported this for 1–4 questions and 12% (n = 223) for 5–8 (Figure 2). The question with the highest percentage of responses for negative experience of care was: "Were you able to ask questions during the examination and treatment?" (n = 1009, 34%).

Descriptive statistics for the study population are given in Table 2. Participant age ranged from 12–50 years, with a mean age of 27 years. Most participants reported that they were married or cohabitating (75%, n = 2116), with secondary or higher-level education

TABLE 1 Frequency distribution of reported negative experience of care by question (*n* = 2918)

Question ^a (No.)	Frequency No. (%)					
During your stay at this hospital, were you given explanations regarding your care and treatment? ($n = 2947$)						
Yes	2388 (81)					
No	562 (19) ^c					
Were you able to ask questions during the example treatment? $(n = 2947)$	nination and					
Yes	1941 (66)					
No	1009 (34) ^c					
Do you feel your doctor told you everything you need to know about decisions taken for your care? ($n = 2941$)						
Yes	2305 (78)					
No	639 (22) ^c					
Did you feel your choices and preferences were your hospital stay? ($n = 2932$)	e followed during					
Yes	2393 (82)					
No	542 (18) ^c					
Were you spoken to nicely? ($n = 2937$)						
Yes	2683 (91)					
No	257 (9) ^c					
Did you receive pain medications during your h $(n = 2927)$	ospital stay?					
Yes	2551 (87)					
No	389 (13) ^c					
How satisfied are you with the level of privacy treatment? ($n = 2930$)	during exams and					
Satisfied	2499 (85)					
Dissatisfied ^b	434 (15) ^c					
How satisfied are you with the time awaited to provider in the facility? ($n = 2928$)	see a healthcare					
Satisfied	2297 (78)					
Dissatisfied ^b	634 (22) ^c					
Overall (n = 2918)						
No reports	1097 (38)					
At least one report	1821 (62) ^c					

^aFrom the WHO MCS-A audio computer-assisted self-interview survey.

^bIncludes "neutral."

^cClassified as negative experience of care.

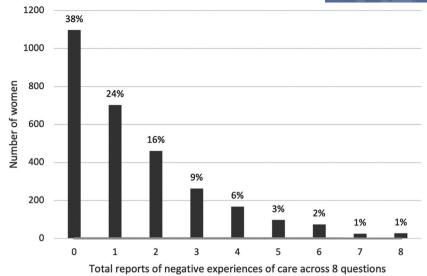


FIGURE 2 Frequency and percentage of reported negative experience of care (n = 2918)

(57%, n=1427), middle household SES (57%, n=1657), and economic independence (72%, n=1888). Abortion-related complications were mild for 60% (n=1736) of the sample, moderate for 27% (n=792), and severe for 13% (n=390). Most participants had a spontaneous abortion (74%, n=2149) and incomplete abortion comprised 79% (n=2296) of the clinical diagnoses.

Participants attended 209 health facilities. In line with selection criteria, most facilities were in urban settings and secondary or tertiary level. 61% (n=1779) of participants received care at facilities reportedly following all PAC guidelines. By region, 43% (n=1250) of participants were in West Africa, 42% (n=1242) Eastern Africa, and 15% (n=426) Central Africa. Approximately 30% (n=870) of participants were in countries where abortion was legal only "to save a woman's life" (i.e. more restrictive), 22% (n=636) in countries that allowed abortion "to preserve health," and 48% (n=1412) in countries that permitted abortion "in certain cases" (i.e. less restrictive).

Estimates of the association between risk factors and negative experiences of care are given in Table 2. There was strong evidence that participants who were adolescents, unmarried, with lower SES, limited economic independence, and who attended facilities with none of the guidelines in use had higher odds of reporting negative experiences of care. Women in West and Central Africa, compared to Eastern Africa, and those under more restrictive abortion laws also had higher odds of reporting negative experiences of care. There was weak to no evidence of an association between negative experience of care and education attended, abortion type, parity, and facility location or level.

Crude results showed a moderate relationship between abortion complication severity and negative experience of care (mild OR 1.00, moderate OR 1.10 [95% CI, 0.91–1.32], severe OR 1.34 [95% CI, 1.06–1.70], P=0.04). After adjusting for country, age group, and household SES, there was strong evidence that women with severe complications had 40% higher odds of reporting negative experience of care (moderate OR 1.12 [95% CI, 0.91–1.36], severe OR 1.40

[95% CI, 1.09–1.79], P = 0.02). For women with moderate complications, there was moderate evidence of 12% higher odds of reporting negative experiences, compared to those with mild complications.

As determined by one-way ANOVAs, we found significant differences in mean reports between countries ($F_{(10,2907)}=39.34$, P<0.001) and geographical regions ($F_{(2,2915)}=66.29$, P<0.001) (Figure 3). Chad and Benin had the highest mean reports (3.18 and 2.32, respectively). Malawi was the only country with a mean report score under one. A Tukey post-hoc test revealed that reports of negative experiences were statistically higher in Central Africa, compared to both Eastern (0.92 \pm 0.09, P=0.008) and West Africa (0.28 \pm 0.09, P<0.001). A one-way ANOVA for household SES also showed a statistically significant difference in reports between SES categories ($F_{(2,2905)}=61.79$, P<0.001), where participants with low SES had higher composite reports (mean = 2.04), compared to middle (mean = 1.42) and high SES (mean = 0.97).

4 | DISCUSSION

We found that three in five women reported at least one negative experience of care for facility-based treatment of abortion complications, suggesting that quality of PAC is a major public health concern in participating African countries. Consistent with previous studies, women who were adolescents, single, of lower household SES, and who were economically dependent were more likely to report negative experiences of care. ^{5,8,12,13,17} New findings suggested women with moderate and severe complications had 12% and 40% higher odds of reporting negative experiences of care, respectively. In facilities, adherence to no relevant PAC guidelines increased odds of negative experience of care twofold. Women in West and Central Africa, compared to Eastern Africa, had nearly twice the odds of negative experience of care; additionally, women in Central Africa had significantly higher mean number of reports. Contrary to the

TABLE 2 Characteristics of the study population (n = 2918) and risk factors for reported negative experiences of care

Risk factors	Total women (n)	Reported negative experience of care (%)	Crude OR (95% CI) ^a	P value ^b	Adjusted OR (95% CI) ^c	P value
Sociodemographic factors						
Age, years ($n = 2874$)				< 0.001		< 0.001
10-19	451	292 (65)	1.56 (1.24-1.97)		1.62 (1.28-2.05)	
20-29	1344	873 (65)	1.41 (1.18-1.68)		1.47 (1.23-1.76)	
30+	1079	630 (58)	1.00		1.00	
Marital status ($n = 2805$)				0.001		0.04
Married/cohabit	2116	1299 (61)	1.00			
Single	627	422 (67)	1.44 (1.17-1.76)		1.30 (1.04-1.62)	
Sep./divorced/widowed	62	42 (68)	1.38 (0392-2.06)		1.32 (0.89-1.96)	
Education ($n = 2482$)				0.03		0.07
None	336	263 (78)	1.38 (1.02-1.86)		1.33 (0.97–1.84)	
Primary	719	432 (60)	1.13 (0.92-1.39)		1.05 (0.85-1.30)	
Secondary or more	1427	866 (61)	1.00		1.00	
Household SES ($n = 2908$)				< 0.001		<0.001
High	487	240 (49)	1.00		1.00	
Middle	1657	1018 (61)	1.45 (1.17-1.81)		1.48 (1.19-1.85)	
Low	764	559 (73)	2.28 (1.73-2.99)		2.35 (1.78-3.09)	
Economic independence $(n = 2615)$				<0.001		0.01
Yes	1888	1147 (61)	1.00		1.00	
No	727	496 (68)	1.53 (1.22-1.91)		1.32 (1.05-1.66)	
Clinical factors						
Abortion type ($n = 2903$)				0.34		0.69
Induced	754	485 (64)	1.10 (0.89-1.37)		1.04 (0.84-1.29)	
Spontaneous	2149	1329 (62)	1.00		1.00	
Parity $(n = 2071)$				0.74		0.95
0	199	129 (65)	1.00		1.00	
1-4	1610	987 (61)	0.91 (0.64-1.28)		0.96 (0.68-1.35)	
5+	262	170 (65)	0.85 (0.56-1.28)		1.00 (0.64-1.54)	
Final diagnosis ^d ($n = 2918$)				0.009		0.01
Incomplete	2296	1415 (62)	1.00		1.00	
Septic	224	156 (70)	1.40 (0.009-1.08)		1.38 (1.06-1.80)	
Complete	296	179 (60)	0.88 (0.38-0.67)		0.88 (0.66-1.17)	
Complete with complications	102	71 (70)	1.41 (0.22-0.81)		1.55 (0.88-2.70)	
Complication severity $(n = 2918)$				0.04		0.02
Mild ^e	1736	1082 (62)	1.00		1.00	
Moderate ^f	792	472 (60)	1.10 (0.91-1.32)		1.12 (0.92-1.36)	
Severe ^g	390	267 (68)	1.34 (1.06-1.70)		1.40 (1.09-1.79)	
Facility factors						
Facility location ($n = 2918$)				0.70		0.57
Urban	2199	1424 (65)	1.00		1.00	
Peri-urban	434	231 (53)	0.85 (0.59-1.23)		0.83 (0.59-1.18)	
Rural	285	166 (58)	0.93 (0.59-1.48)		0.89 (0.55-1.42)	

TABLE 2 (Continued)

Risk factors	Total women (n)	Reported negative experience of care (%)	Crude OR (95% CI) ^a	P value ^b	Adjusted OR (95% CI) ^c	P value
	women (ii)	experience of care (70)	(7570 617		(7575 617	
Facility level ($n = 2918$)				0.69		0.81
Primary	327	244 (75)	0.80 (0.35-1.84)		0.79 (0.34-1.87)	
Secondary	1657	965 (58)	0.86 (0.64-1.15)		0.87 (0.65-1.17)	
Tertiary	785	525 (67)	1.00		1.00	
Other	149	87 (58)	0.78 (0.43-1.40)		0.89 (0.62-1.15)	
Guidelines in use ^h ($n = 2915$)				0.02		0.05
None	37	33 (89)	2.55 (1.12-5.76)		2.26 (0.97-5.24)	
Some	1099	677 (62)	0.86 (0.63-1.17)		0.85 (0.62-1.15)	
All	1779	1109 (62)	1.00		1.00	
Geopolitical factors						
Abortion legality $(n = 2918)$				< 0.001		<0.001
In certain cases	1412	998 (71)	1.00		1.00	
To preserve health	636	384 (60)	0.72 (0.51-1.01)		0.74 (0.52-1.03)	
To save a woman's life	870	439 (50)	0.46 (0.34-0.63)		0.52 (0.38-0.71)	
Geographical region $(n = 2918)$				<0.001		<0.001
Eastern Africa	1242	664 (53)	1.00		1.00	
West Africa	1250	873 (70)	2.00 (1.50-2.68)		2.05 (1.53-2.75)	
Central Africa	426	284 (67)	1.80 (1.14-2.83)		1.53 (0.98-2.39)	

^aCrude model accounts for clustering by facility.

¹Abortion legality classifications from the Global Abortion Policies Database.

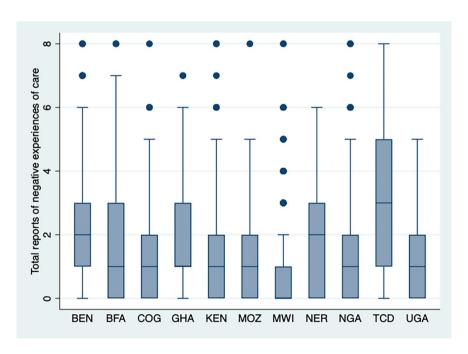


FIGURE 3 Comparison of average reports of negative experience of care by country

 $^{{}^{\}mathrm{b}}P$ value from parametric test.

^cOdds ratios account for clustering by facility and are adjusted for age group, household socioeconomic status, and country.

^dExcluded ectopic and molar pregnancies.

^eMild complications based on abnormal physical examination findings on initial assessment.

^fModerate complications include heavy bleeding, suspected intra-abdominal injury, or infection.

gSevere complications is a composite of WHO potentially life-threatening conditions and severe maternal outcomes.

^hFacility guidelines include Safe Abortion Guidance, WHO guidelines, evidence-based local guidelines, and clinical audits.

anticipated association direction, women receiving care under more prohibitive abortion laws had half the odds of reporting poor experiences of care, compared to less restrictive laws.

These results support existing claims that negative experiences of care are linked to inequities in patient characteristics and the treatment environment. 8,12,22 There are multiple reasons why women from marginalized groups may be more likely to report poor experiences. Sen et al. 8 described how racial, ethnic, religious, or caste biases may provoke discriminatory or dehumanizing care. They also suggest that poorer or immigrant women may be less adept at navigating the health system and/or experience linguistic barriers that prevent them from negotiating improvements. Abuya et al. 12 found facilities with unhygienic practices and inadequate structural materials predicted mistreatment, especially related to preserving patient privacy and dignity. Thus, both institutional and individual factors frame providers' behavior.

The present study benefited from the novel use of ACASI to measure experiences of care and aimed to reduce social desirability and interviewer bias. Although it is plausible the ACASI captured women's comfortability in reporting, rather than their experiences, the Guttmacher Institute has shown that self-administered questionnaires significantly improved abortion reporting in the USA [23]. Other advantages include the moderate sample size, which allows for more precise estimates, and the breadth of countries, which improves potential for generalizability.

Several limitations should be considered. Multiple studies in lowresource environments have shown that population-level data and facility records can be unreliable, incomplete, or inaccurate, specifically for quality assessments of care during labor and delivery and PAC. 16,24,25 The smaller subset of eligible participants who completed the ACASI introduces risk of selection bias, though initial analyses showed comparability across patient characteristics between the sample and study population. 19 The composite measure of negative experience of care did not incorporate certain dimensions, such as physical abuse, freedom from detention, or emotional support, which limits its content validity. This was true for the construction of risk factors as well, namely household SES and economic independence, thereby curbing reproducibility. Abortion legality was defined only per legislation and did not account for enforcement nor providers' or women's knowledge of abortion laws. This is a notable distinction, as legal criteria are interpretable at the discretion of medical practitioners and availability of safe abortions varies dramatically between countries with similarly stringent laws.⁵ Finally, individual experiences of care are highly subjective, whereby a practice that an observer might unambiguously identify as negative or disrespectful may be normalized by the woman subjected to it or by the provider.

5 | CONCLUSION

This paper sought to quantify the proportion of women experiencing suboptimal care for the treatment of abortion complications—a stigmatized type of care historically overlooked, especially in the

context of the African countries included in the WHO MCS-A. Findings indicated that most women reported negative experiences, and myriad sociodemographic, clinical, institutional, and geopolitical factors played a role. To improve quality of care for the management of abortion complications, multifaceted interventions are needed to target provider biases related to patient identity and abortion legality, increase the application of PAC guidelines in facilities, and empower women in demanding better treatment. Further mixed-methods research is called for to develop a standardized and validated measure of experience of care specific to PAC that documents violations of women's right to quality care, while acknowledging the complex and context-sensitive nature of this phenomenon.

ACKNOWLEDGMENTS

The WHO Multi-Country Survey on Abortion (MCS-A) is a research project implemented by the WHO across a network of health facilities in Africa. We sincerely thank the women who participated in this study. WHO is grateful to the extensive network of institutions and individuals who contributed to the project design and implementation, including researchers, study coordinators, data collectors, data clerks, and other partners, including the staff from the Ministries of Health and WHO country offices. This research was funded by the UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP), Department of Reproductive Health and Research, WHO. The contents of this article are the sole responsibility of the authors and do not necessarily reflect the views of WHO, or their individual institutions.

CONFLICTS OF INTEREST

Outside of the submitted work, JPD reports grant funding received from USAID, UNFPA, DGD—Belgium, NIHR, Bill and Melinda Gates Foundation, Amplify Change, IDRC, and PMI; consulting fees from Bill and Melinda Gates Foundation, USAID, and Enabel; and lecture fees from the Karolinska Institute. Outside of the submitted work, CC reports consultancy fees to her institute received from WHO. SG reports institutional funding from WHO for data collection in this study. VF reports WHO funding to support data analysis in this study.

REFERENCES

- Sedgh G, Bearak J, Singh S, et al. Abortion incidence between 1990 and 2014: global, regional, and subregional levels and trends. Lancet. 2016:388:258-267.
- Åhman E, Shah IH; World Health Organization, Special Programme of Research D and Research Training in Human Reproduction (World Health Organization). Unsafe abortion: global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008. WHO; 2011.
- Ganatra B, Gerdts C, Rossier C, et al. Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model. *Lancet*. 2017;390:2372-2381.
- Faúndes A, Shah IH. Evidence supporting broader access to safe legal abortion. Int J Gynecol Obstet. 2015;131:S56–S59.
- Singh S, Remez L, Sedgh G, Kowk L, Onda T. Abortion Worldwide: Uneven Progress and Unequal Access. Guttmacher Institute; 2017.

- Aantjes CJ, Gilmoor A, Syurina EV, Crankshaw TL. The status of provision of post abortion care services for women and girls in Eastern and Southern Africa: a systematic review. Contraception. 2018;98:77–88.
- 7. World Health Organization. Standards of care to improve maternal and newborn quality of care in facilities. WHO; 2017. https://www.who.int/maternal_child_adolescent/topics/quality-of-care/quality-of-care-brief-standards.pdf. Accessed October 6, 2021.
- Sen G, Reddy B, Iyer A. Beyond measurement: the drivers of disrespect and abuse in obstetric care. Reprod Health Matters. 2018:26:6-18.
- Bowser D, Hill K. Exploring Evidence for Disrespect and Abuse in Facility-Based Childbirth. Report of a Landscape Analysis. September 20, 2010. https://www.ghdonline.org/uploads/Respectful_Care_at_ Birth_9-20-101_Final1.pdf. Accessed October 6, 2021.
- White Ribbon Alliance. Respectful Maternity Care: The Universal Rights of Childbearing Women. October 2011. https://www.white ribbonalliance.org/wp-content/uploads/2017/11/Final_RMC_ Charter.pdf. Accessed October 6, 2021.
- Sheferaw ED, Mengesha TZ, Wase SB. Development of a tool to measure women's perception of respectful maternity care in public health facilities. BMC Pregnancy Childbirth. 2016;16:67.
- Abuya T, Sripad P, Ritter J, Ndwiga C, Warren CE. Measuring mistreatment of women throughout the birthing process: implications for quality of care assessments. Reprod Health Matters. 2018;26:48-61.
- Bohren MA, Vogel JP, Hunter EC, et al. The mistreatment of women during childbirth in health facilities globally: a mixed-methods systematic review. PLoS Medicine. 2015;12:e1001847.
- Sudhinaraset M, Landrian A, Afulani PA, Phillips B, Diamond-Smith N, Cotter S. Development and validation of a person-centered abortion scale: the experiences of care in private facilities in Kenya. BMC Womens Health. 2020;20:208.
- Mutua MM, Manderson L, Musenge E, Achia TNO. Policy, law and post-abortion care services in Kenya. PLoS One. 2018;13:e0204240.
- Suh S. What post-abortion care indicators don't measure: Global abortion politics and obstetric practice in Senegal. Soc Sci Med. 2020;254:112248.
- 17. Baynes C, Yegon E, Lusiola G, Kahando R, Ngadaya E, Kahwa J. Women's satisfaction with and perceptions of the quality of

- postabortion care at public-sector facilities in Mainland Tanzania and in Zanzibar. *Glob Health Sci Pract*. 2019;7:S299-314.
- Kim CR, Tunçalp Ö, Ganatra B, Gülmezoglu AM. WHO multi-country survey on abortion-related morbidity and mortality in health facilities: study protocol. BMJ Glob Health. 2016;1(3):e000113.
- 19. Qureshi Z, Mehrtash H, Kouanda S, et al. Understanding abortionrelated complications in health facilities: results from WHO multicountry survey on abortion (MCS-A) across 11 sub-Saharan African countries. BMJ Glob Health. 2021:6:e003702.
- 20. World Health Organization. Global Abortion Policies Database. https://abortion-policies.srhr.org/. Accessed August 5, 2020.
- United Nations Statistics Division. Methodology: Standard country or area codes for statistical use. https://unstats.un.org/unsd/methodology/m49/. Accessed August 8, 2020.
- Rehnström Loi U, Gemzell-Danielsson K, Faxelid E, Klingberg-Allvin M. Health care providers' perceptions of and attitudes towards induced abortions in sub-Saharan Africa and Southeast Asia: a systematic literature review of qualitative and quantitative data. BMC Public Health. 2015;15:139.
- 23. Udry JR, Gaughan M, Schwingl PJ, van den Berg BJ. A medical record linkage analysis of abortion underreporting. *Fam Plann Perspect*. 1996;28:228.
- 24. Adler AJ, Filippi V, Thomas SL, Ronsmans C. Incidence of severe acute maternal morbidity associated with abortion: a systematic review. *Trop Med Int Health*. 2012;17:177-190.
- Tripathi V, Stanton C, Strobino D, Bartlett L. Measuring the quality of maternal and care processes at the time of delivery in sub-Saharan Africa: development and validation of a short index. BMC Pregnancy Childbirth. 2019;19:133.

How to cite this article: Govule P, Baumann S, Dossou J-P, et al. Experiences of women seeking care for abortion complications in health facilities: Secondary analysis of the WHO Multi-Country Survey on Abortion in 11 African countries. *Int J Gynecol Obstet*. 2021;00:1–9. doi:10.1002/ijgo.13987