Uganda - Measuring Abortion Incidence, Severity of Complications, and Health Facilities' Capacity to Provide Abortion Care in Refugee Settings in Uganda, BAOBAB STUDY

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Overview

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Overview

ABSTRACT
Abstract

Background

Sparse evidence is available to support improved programming and reporting on SRHR in refugee settings in the East and Horn of Africa, where unsafe abortion is one of the major causes of maternal mortality and morbidity. It is important to design studies that explicitly investigate the sexual and reproductive health needs and outcomes of refugee populations, as it is likely that these factors differ among refugee populations as compared to the general population. Understanding the state of abortion in a given context, including abortion incidence, safety, and outcomes, is challenging due to the limitations of currently available methodologies.

Objectives: To determine the incidence of induced abortions and the severity of abortion-related complications in refugee settings in Uganda.

Methods: The study employed a quantitative cross-sectional design. The study components included three separate surveys. Although the study was not nationally representative, efforts were made to ensure representativeness at the refugee settlement/camp level : i) representative Health Facility Survey (HFS) to estimate the number of women who receive post-abortion care (PAC) following abortion complications, ii) a Knowledgeable Informants Survey (KIS) to capture information on the proportion of all women having abortions who receive facility-based treatment for abortion-related complications, and iv) a Prospective Morbidity Survey (PMS) to capture information necessary to describe characteristics of women receiving treatment for abortion complications, the severity of complications, the type of treatment received, and the delays in access to PAC. The PMS also included clinical data abstraction from the medical records.

Potential Impact: This will help host governments, humanitarian partners, and donors to seek long-term, innovative, cost-effective SRHR development solutions to bring about change in the health and lives of refugee women and girls.

UNITS OF ANALYSIS
Abortion Incidence, Severity of Complications, and Health Facilities' Capacity to offer Post Abortion Care for people living in refugee settings in Uganda.

Individual - PAC patients, Knowledgeable Informants

Institutional (Health Facility) - PAC is providers

Scope

NOTES

Health Facility Survey (HFS) : Patient's Medical Assessment, Laboratory Findings, Assessment of Complication Severity, Management and Outcomes of abortion complications

Knowledgeable Informants Survey (KIS) : Background of the respondent, general question, induced abortion, answer certainity, miscarriage treatment and stigma questions related to abortion complications

Prospective Morbidity Survey (PMS) :

a)PMS_Patient-provider survey:

basic information, Reproductive health history, Symptoms and care-seeking decisions, Quality of abortion and family planning services, Abortion knowledge and attitudes, security, conflict and violence, Pms provider section, general information on patient intake, Initial examination and observations, complication questions, procedures and medications, likely abortion questions and final outcome of the treatment

b) PMS_PMS_MRR:

Patient's Medical Assessment, Laboratory Findings, Assessment of Complication Severity, Management and Outcomes of abortion complication

Coverage

GEOGRAPHIC COVERAGE

refugee settlements in Uganda

UNIVERSE

The study targeted women aged 15-49, living in refugee settings in Uganda with the following tools: a Health Facility Survey (HFS) targeting health facilities in the refugee setting concerned and the surrounding, a Knowledgeable Informants Survey (KIS) collected information on the proportion of all women having abortions who receive facility-based treatment for abortion-related complications, and a Prospective Morbidity Survey (PMS) captured information to describe characteristics of women receiving treatment for abortion complications, the severity of complications, the type of treatment received, and the delays in access to PAC. The PMS also included clinical data abstraction from the medical records.

Producers and Sponsors

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Bonnie Wandera	African Population and Health Research Center	Co-investigator
Yadeta Dessie Bacha	African Population and Health Research Center	Co-investigator

FUNDING

Name	Abbreviation	Role
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Norwegian Agency for Development Cooperation	NORAD	Funder

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Name	Affiliation	Role
Office of the Prime Minister	Government of Uganda	
Department of Refugees	Government of Uganda	
Ministry of Health	Government of Uganda	
District Health Officers	Government of Uganda	
United Nations High Commissioner for Refugees (UNHCR) Uganda		
Janet Munyasya	Boabab RPC	administrative support
Bonface Ingumba	African Population and Health Research Center	Data Governance Officer

Metadata Production

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Sampling

Sampling Procedure

Sampling took place at different levels of the study since it had different components:
Health Facility Survey

It was administered to all health facilities located within the 13 refugee settlements in Uganda. However, due to the integration of social services, including healthcare, some women from the host community had accessed services (or even reside) within the refugee settlements, and refugee women could choose to visit health facilities located outside the settlements. Therefore, we did not limit the HFS to facilities located within the 13 refugee settlements in Uganda. To construct the census, UNHCR provided a list of facilities (n=110) capable of providing PAC located within or just outside all 13 refugee settlements that were in operation at the time of data collection. However, upon further investigation, we excluded 17 of these facilities, either because they had health posts that do not provide PAC (n=8), do not serve refugees (n=3), or because they had recently closed (n=6). In addition, we identified additional eligible facilities during the fielding process that were not included in the UNHCR list (n=9). As such, our final HFS sample consisted of 102 facilities. At each facility, a senior staff member who was knowledgeable about the provision of PAC and had been working at their facility for at least 6 months was interviewed. Facility types included Health Center II (typically small health clinics), Health Center III (larger health centers with maternity wards), and Health Center IV and above (hospitals with maternity wards and inpatient services). Overall, 89.2% of facilities (n=91) were located within the borders of a refugee settlement.

Knowledgeable Informant Survey
For the KIS, we purposely identified and sampled individuals who were knowledgeable about induced abortion among refugee populations in Uganda. These individuals included providers who serve refugee women, including nurses, midwives, clinical officers, doctors, social workers, traditional birth attendants, and community health providers, as well as district-level health officers and coordinators and staff at NGOs that provide services to refugee women within the settlements. The final sample consisted of 59 of these knowledgeable informants.

Prospective Morbidity Survey
To select facilities for the PMS, we asked HFS Research Assistants to collect contact information of facility leadership for potential PMS participation. We contacted and invited all facilities to participate in the PMS. We excluded Health Posts (HPs) from the sample, which typically do not provide PAC. However, given that facility levels can often change, there were some discrepancy between levels identified in our original HFS universe, and the level the facility was later identified as when in the field. For example, despite excluding HPs from our sampling frame, one HP was included as it was erroneously classified as a level 3 facility in our HFS sample and was dropped from analysis. In addition, some facilities were unable to send health facility staff to the PMS training. As such, the final PMS sample consisted of 65 health facilities.

Deviations from Sample Design

PMS: A sample was randomly drawn from the original list of facilities provided to us by UNHCR Uganda. The original sampling design was based on facility level, drawing 0% of HPs, 40% of HC IIs, and all HC IIIs and HC IVs. Some facilities in the UNHCR master list were found in the HFS to not provide PAC, and were purposively replaced by facilities that did provide PAC. One HP was mistakenly included in PMS fielding, but was dropped from analysis.

KIS: N/A

HFS: N/A

Response Rate

KIS: N/A

HFS: 100% (census survey)

PMS, Uganda: Of the 78 facilities sampled for participation in the PMS, a total of 65 participated (response rate: 67.9%). Due to the sampling deviation described above (the PMS sample being drawn from the original UNHCR facility list during HFS fielding), 15 facilities were purposively replaced by those deemed to be ineligible due to non-provision of PAC. Regarding the individual-level response rate, all patients treated at the sampled facilities during the study period were eligible to participate in the study. The participation rate of patients was 89% overall, 85.7% at HC IIs, 88.6% at HC IIIs, and 94.9% at HC IVs.

Weighting

HFS & KIS: N/A

PMS: The variable named, wgt_pmsind, was used as the weighting coefficient. This weight was a product of two calculations:
-stage1 was the total number of PAC patients presenting to sampled facilities during PMS fielding divided by the number of patients that participated in the PMS. This was meant to account for individual-level response rates.
-stage2 was another division meant to account for the total universe of PAC cases (including PAC cases served at facilities not sampled in the PMS). The numerator was the total number of PAC patients estimated to be treated by facility level, which was calculated using questions from the HFS on PAC patients seen during the past month and an average month at each facility. The denominator was the total number of PAC patients presenting to sample facilities during PMS fielding by facility level.

Questionnaires

Overview

The study used four questionnaires during data collection with different target population. The questionnaires were written in English. The HFS questionnaire captured information to estimate the number of women receiving treatment in facilities for complications from unsafe abortions, the KIS questionnaire was used to collect information on the proportion of all refugee women having abortions who received facility-based treatment for abortion-related complications and the PMS provided data necessary to describe characteristics of women living in refugee settings and receiving treatment for abortion complications, the type of treatment received for complications, uptake of post-abortion family planning, and the delays in access to post-abortion care. The PMS also included charts review to abstract data on laboratory measurements, procedures and management of complications for PAC patients.

Data Collection

Data Collection Dates

Start	End	Cycle
2023-03-01	2023-05-31	N/A

Data Collection Mode

Face-to-face [f2f]

Questionnaires

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Supervision

Field teams for the HFS and KIS were organized into two groups: north and south. Each group had seven Reaserch Assistants, managed by one study coordinator. The PMS exercise which consisted of 65 health facilities was supervised by six study coordinators. All coordinators were supervised by the in-country PI. The roles of coordinators included the following:
1) Provide logistics support during training of field teams.
2) Provide logistics support for research staff and data collection teams during fieldwork and ensure the smooth and efficient day-to-day operation of research and data collection activities.
3) Monitor progress of research activities, develop and maintain records of research activities, and prepare periodic and ad hoc reports on fieldwork progress, as required by study investigators, administrators, funding agencies, and/or regulatory bodies.
4) Implement quality control procedures throughout the data collection period.
5) Maintain an inventory of Tablets for data collection.
6) Coordinate fieldwork activities, including introducing the study to relevant stakeholders
7) Read and understand the protocol for the data collection process to facilitate the execution of the expected tasks.
8) Participate in in-person training to understand the study objective, design, research ethics and the process of data collection.
9) In collaboration with the Research Assistants, list professionals who are well-informed about abortion provision and post-abortion care in the public and private/NGO sectors in refugee settings in Uganda
10) Book an appointment for Knowledgeable Informant Survey (KIS) participants and Health Facility in-charges
11) Visit assigned study sites to support conducting KIS and HFS using relevant survey tools
12) Support research assistants to generate a summary of the data outputs and transmit the same daily
13) Maintaining regular communication between Research Assistants, Principal Investigator (PI) and co-investigators (co-I) of the project
14) Compile the summary fieldwork reports
15) Participation in a de-brief meeting
16) Perform miscellaneous job-related duties as assigned by the study investigators.
The in-country PI visited the field on a weekly basis to provide leadership, oversight, technical guidance, troubleshooting and ensure that the field teams are following the protocol during implementation. The in-country PI was also a link between the field teams and upper management through providing weekly updates of what is happening in the field but also relaying information to the field teams in terms of what needs to be improved, changed or corrected.

Data Processing

Data Editing

Interviews for all surveys was conducted face-to-face, using Open Data Kit (ODK) software on Android smartphones. Completed ODK forms were submitted to a secure cloud server using Wi-Fi or mobile data networks accessible only to the study team. The data was later uploaded to Stata to be cleaned and analyzed.

Other Processing

N/A

Data Appraisal

Estimates of Sampling Error

Analyses were performed in Stata 19. The dataset was weighted using the following command: svyset [pweight=wgt_pmsind].

Documentation

Questionnaires

Baobab_HFS_printable.docx

Title	Baobab_HFS_printable.docx
Author(s)	African Population and Health Research Center, Population Council, Inc., Guttmacher Institute
Date	04/12/2025
Country	Uganda
Language	ENGLISH
Contributor(s)	Yohannes Wado, Stella Muthuri, Margaret Giorgio,
Publisher(s)	African Population and Health Research Center (APHRC)
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Baobab_PMS_Patient_Provider_printable.docx

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Filename	Baobab_PMS_Patient_Provider_printable.docx

Baobab_KIS_printable.docx

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