Title: Assessing the knowledge and practice of pharmacists on medical abortion using the WHO protocol of self-managed abortion.

ABSTRACT

Background

Pharmacists, as drug therapy experts, provide drug therapy management services based on a collaboration between the pharmacist, the patient (or his or her caregiver), physicians, and other members of the patient's health care team; thus, their absence can result in high morbidity and mortality if drug therapy is not observed. In Societies where access to hospitals for SRH services is almost impossible or health services are used to treat conditions or illnesses associated with stigma, community pharmacy services are being used more. We aim to assess the knowledge of pharmacist regarding the World Health Organization (WHO) protocol for self-managed abortion and mapped out pharmacy that provide abortion services.

Methodology

A descriptive cross-sectional study was used for this study. A snowball cluster sampling technic was used to identify pharmacist or drug store owners in communities in the North West and South West conflict affected regions of Cameroon.

Results

Following the pharmacist who accepted to participate in the study, less than one third of them (15.4%) knew about the WHO protocol on SMA. The most common drug provided to clients for abortion was postinor. More than half of study participants had inadequate knowledge of the WHO protocol on self-managed abortion. Most of client who seek for the abortion service from these pharmacists were between the age group 14 to 27 years of age.

Conclusion

Though there exist some restrictive law in Cameroon concerning abortion, many do seek the service from community pharmacies who in majority don't have adequate knowledge on its protocol. Many pharmacists still use pills like postinor for abortion, thus conducting training of this pharmacists is imperative to promote and improve safe access to SMA service.

Key words

Abortion, pharmacist, self-manged abortion,

BACKGROUND

Induced Globally, more and more women are opting to terminate their pregnancies for societal reasons. It is estimated that 50 million unborn babies are terminated every year across the globe, causing the lives of 200,000 pregnant women and the agony of millions more people (1). Abortion in violation of the law can result in very serious problems (2). More than half of pregnancy-related deaths of women globally occur in sub-Saharan Africa. Among those deaths, complications from unsafe abortion are one of the most common and easily preventable and treatable causes (3). By "abortion," we refer to spontaneous, induced, or missed abortions, as well as a multitude of other conditions requiring the evacuation of uterine products, such as intrauterine foetal demise and molar pregnancy. The decision to terminate a pregnancy due to a medical condition is hardly common and accounts for just a small percentage of total abortions.

Pharmacists, as drug therapy experts, provide drug therapy management services based on a collaboration between the pharmacist, the patient (or his or her caregiver), physicians, and other members of the patient's health care team; thus, their absence can result in high morbidity and mortality if drug therapy is not observed. In societies where access to hospitals for SRH services is almost impossible or health services are used to treat conditions or illnesses associated with stigma, community pharmacy services are being used more. Community pharmacies play a vital role in improving patient care through the medication and prescriptions they provide.

Pharmacists play an important role in the provision of reproductive health care, including prescribing hormonal contraception and emergency contraception (2). But pharmacists have limited involvement in abortion care, primarily due to the legal restrictions in Cameroon (4). Whereas, community pharmacists may be well-positioned to provide medication abortion care, as they safely provide other reproductive health care, including hormonal contraception (5). In Cameroon, the legal prohibition of induced abortion has not deterred women from ending unwanted pregnancies. The risk of criminal sanctions has, however, obliged them to do so without medical assistance seeking this service from untrained community pharmacists.

The study we have developed aims to assess the knowledge of service providers regarding the World Health Organization (WHO) protocol for self-managed abortion. This protocol outlines safe and effective procedures for individuals seeking to end their pregnancies outside of a clinical setting. Our study seeks to gauge the understanding and familiarity of service providers with this important protocol, ensuring accurate information dissemination and quality care provision since according to Guttmacher Institute from 2015 to 2019 abortion rate increases from 29% to 41%. Additionally, the test aims to gather data on the age group that accesses self-managed abortion the most, as well as the number of people currently offering this service. Through this assessment, we aim to contribute to the improvement of abortion services and overall reproductive healthcare so as to reduce the rate of unsafe abortion.

METHODOLOGY

A descriptive cross-sectional study was conducted in the North West and South West crises affected regions of Cameroon specifically in the rural areas of Bamenda, Buea, Limbe, Mutengene and Tiko towns. Participants of this study were pharmacists or drug store owners. The period of the study was between September 1, 2023 and November 31, 2023. The main study tool was a questionnaire designed by the study team. The questionnaire had 25 questions and was administered by two trained researchers. The questionnaire was anonymous and included closed and open-ended questions. Participants eligible to be interviewed were identified on a daily basis using a snowball technic. The questionnaire examined socio-demographic characteristics of the participants, and knowledge of WHO protocol on medication abortion. All analyses were performed with SPSS for window 25.0 (SPSS Inc., Chicago, IL). Descriptive statistics were used for categorizing the sample by variables. A p value of less than 0.05 was considered as statistically significant. Participants were identified through snowballing in all the communities. The number of participants included in the study was the total number of pharmacies and drug stores identified in communities that were willing to participate in the study. Questionnaires were designed to take into consideration the very sensitive nature of self-managed abortion in Cameroon.

RESULTS AND DISCUSSION

Of the 162 participants in the study, 117 (72%) are from the Southwest region and 45(28%) are from the Northwest region. Also, more than half 95 (58.6%) from Buea, 45 (27.8%) from Bamenda, 19 (11.7%) from Mutengene and 3 (1.9%) from Tiko. In addition, 149 (92.0%) of the participants identify their stores as drug stores, 2 (1.2%) as drug/cosmetic stores and 4 (2.5%) as health clinics. Finally, 118 (72.8%) of the participants have at least a nursing degree, 26(16%) are trained to sell drugs, 5 (3.1%) have lab technician degree and 30 (18.5%) have been trained as pharmacy technician.

Table 1a: Demographic characteristics of study participants

Characteristics		Frequency	Percentage (%)
Region	North West	45	27.8
	South West	117	72.2
	Total	162	100
Town	Bamenda	45	27.8
	Buea	95	58.6
	Mutengene	19	11.7
	Tiko	3	1.9
	Total	162	100
Type of facility	Drug store	149	92
	Drug/cosmetic store	2	1.2
	Health clinic	4	2.5
	Pharmacy	6	3.7
	Pro-pharmacy	1	0.6
	Total	162	100
Profession of service provider	Doctor	1	0.6
	Pharmacy technician	30	18.5
	Health worker	2	1.2
	Lab technician	5	3.1
	Midwife	4	2.5
	Nurse	120	74.0
	Total	162	100

As shown on the figure below, the participants in the study provided multiple services with the most common services being contraceptive (71.6%), wound treatment/care (72.2%), patient care (77.8%), and sales of drugs (98.1%). Community pharmacies have been known to providing multiple services from provision of medications to abortion care.

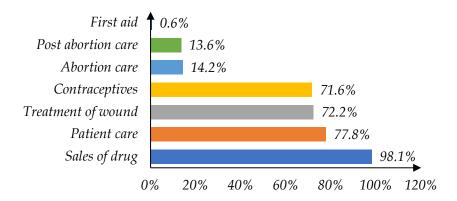
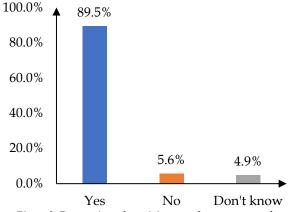
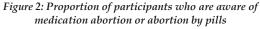


Figure 1: Types of services rendered by the community pharmacy to the clients

Knowledge on WHO protocol on SMA

As seen in **figure 2**, a great majority 145 (89.5%) of the study participants have heard of medication abortion or abortion by pills. Among those who accepted providing abortion service, less than one third (15.4%) of the study participants acknowledge to know the WHO protocol on self-management of abortion.





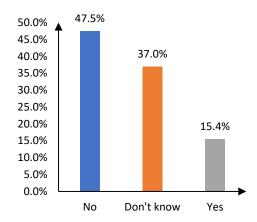


Figure 3: Proportion of participants that know the WHO protocol for self-managed abortion

Out of a total of 5 scores, we had an average of 2.5 scores where those scoring above this were considered to have adequate knowledge and those who score below were considered to have inadequate knowledge. From the graph we can see that out of the 162 participants, 59 (36.4%) participants scored above 2.5 hence have adequate knowledge while 103(63.6%) of the participants scored below the average hence have inadequate knowledge.

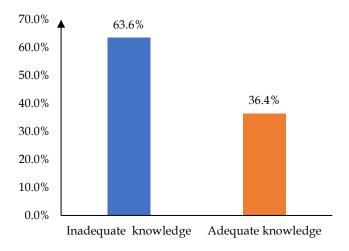


Figure 4: Measure of level of knowledge on WHO protocol on self-managed abortion (SMA)

From **figure 5** below, we can see that majority of the participants who seek for abortion services are between 14-27 years old. In Cameroon, many who reported to have had an abortion are part of this age group identified in this study [6].

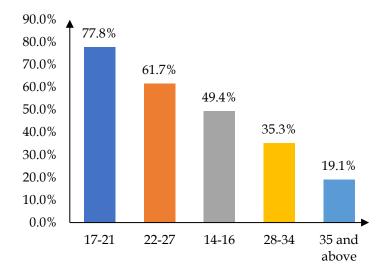


Figure 5: Age group of women who seek SMA services from community pharmacy

DISCUSSION

Women, especially adolescent girls, face a number of barriers to abortion access including stigmatization and lack of information. Pharmacists are in a unique role to provide a safe and supportive environment for a patient coming in to pick up medications for a medical abortion, as well as provide information and resources about safe medical abortion practices. Having an understanding of the safeness of medical abortion by these community pharmacists will greatly help to improve the provision of these services.

CONCLUSION

Our data suggests pharmacists' knowledge when it concerns the WHO protocol on medication abortion as potentially inadequate, however they identified anticipated barriers which must be addressed for successful practice of safe SMA.

The political climate around abortion in Cameroon requires that we continue to explore alternative methods to provide abortions. New models have the potential to impact abortion access. With further investigation into this model of abortion care, pharmacist provision of medication abortion has the potential to increase abortion access, especially for patients in rural areas. Increasing access in rural communities increases equity in abortion access, allowing for faster presentation to care and ease of obtaining services.

RECOMMENDATION

- 1. Pharmacy attendants and owners should be trained on the WHO protocol for self-managed abortion.
- 2. Restrictions on the sale of abortion drugs should be liberalised to make accessibility easy for pharmacies; this will help regulate the prices at which abortion pills are sold and make them more affordable.
- 3. Just a few proportions of pharmacists acknowledge to provide abortion services reason being the restrictive laws that surrounds abortion in Cameroon. Advocating for policies that uplift these laws will help liberalise the access most especially in the rural communities and increase access and availability to these services.
- 4. We recommend a pilot study testing implementation strategies and implementation toolkit development. Additional data has the potential to support changes in the legal framework to allow pharmacists to provide medication abortion in Cameroon

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