

Pharmacy Provision of Medication Abortion in Nepal: Pharmacy Owner and Worker Perspectives

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CONTEXT: Medication abortion has the potential to transform the provision of safe abortion care in low- and middle-income countries, and can be provided with minimal clinical skills and equipment. In Nepal, first-trimester abortion using mifepristone and misoprostol is legally available at government-certified health facilities, but little is known about pharmacy workers' perspectives regarding pharmacy-based provision.

METHODS: In-depth interviews were conducted in 2015 with 19 pharmacy owners and auxiliary nurse-midwives in two districts of Nepal to examine respondents' views on medication abortion and on potential legal provision of medication abortion from pharmacies. Two coders independently reviewed interview transcripts, and coded and analyzed them using a thematic approach.

RESULTS: Participants were confident that they could provide safe medication abortion and felt that they filled an important niche by providing affordable, convenient and confidential services to women in their communities. They saw benefits of integrating pharmacies into legal abortion networks in Nepal, such as improved access to medication abortion and greater privacy. Participants also felt that the quality of the care they provided could be improved through ongoing training of pharmacy-based providers and formal incorporation of such providers into existing networks of abortion provision to streamline referrals.

CONCLUSIONS: Integration of pharmacies into the legal abortion provision system could aid in regulation and training. Consideration of pharmacy workers' perspectives can help to ensure the sustainability and success of safe abortion programs.

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Unsafe abortion is a leading cause of maternal mortality globally and contributes substantially to maternal morbidity, particularly in lower income countries where abortion is highly restricted or illegal.^{1,2} Even in Nepal, which legalized abortion in 2002 and has made extensive efforts to expand services throughout the country,^{3,4} access to safe care remains constrained, particularly in remote areas where trained providers and equipment are scarce.^{5,6} One promising approach for expanding access to safe abortion care outside of traditional clinical settings is medication abortion using mifepristone and misoprostol tablets, which is safe and effective for ending pregnancy during the first trimester and can be provided without laboratory tests, ultrasound or sterile equipment.⁷ In response to global shortages and uneven distribution of skilled abortion providers, the World Health Organization (WHO) has issued recommendations to guide the decentralization of safe medication abortion services via expansion of the types of providers who can deliver medication abortion care and the types of settings in which it can be provided.⁸

Expanding access to medication abortion through pharmacies is a possible route to reaching women who are seeking safe medication abortion. In most developing countries, pharmacies are more accessible than

health facilities and often are the first place women go for abortion information.⁹ Some women, particularly those who lack autonomy or have limited ability to travel, find that pharmacies offer more privacy and convenience than do certified clinical facilities. Despite these advantages, pharmacy provision of medication abortion also has potential drawbacks. For example, research indicates that untrained pharmacy workers often provide inadequate or inaccurate information and unsafe medications to women who are seeking an abortion.^{10–15} Moreover, pharmacy workers' dual roles as both business people and health care providers pose a potential conflict of interest, and may result in their encouraging the sale of more expensive yet less effective products.¹⁶ In recognition of these issues, the WHO guidelines note that training sessions, referral systems and values clarification programs for pharmacy workers can help mitigate the risk of unsafe and ineffective pharmacy abortion. The guidelines also identify the expansion of safe medication abortion care into pharmacies as a priority area for further research.^{8,17}

Since aspiration abortion services first became available in Nepal in 2004 at a maternity hospital in Kathmandu, access to safe care has expanded to all districts and types of facilities. Public primary health care facilities,

including lower level health posts,* and nongovernmental organization–run private facilities that have government certification are allowed to legally provide abortion care.³ Abortion is legally available through 12 weeks' gestation for any reason, and at other gestational ages in particular circumstances.†⁴ When aspiration abortion services first became legally available, care was provided by government-trained and -certified physicians;⁴ the ability to provide services legally was extended to nurses and auxiliary nurse-midwives (ANMs) after studies showed that these cadres of clinicians can, with the requisite training, provide abortion care as safely and effectively as physicians.^{18,19} However, pharmacies—private health facilities (some with small exam rooms) where a pharmacist works and which may also employ a part-time nurse, ANM or physician—are not eligible for government certification for abortion provision, and access to abortion remains limited in many regions in Nepal.^{3,20}

Research on expansion of medication abortion care to pharmacies is scant, but evidence suggests that regardless of the legal status of abortion in a country, women often seek abortion information and services directly from pharmacies.¹⁵ Surveys and mystery-client studies conducted in Latin America, Asia and Africa have documented wide variation in medication abortion practices and poor knowledge among many pharmacists.^{12–14,21–24} Harm-reduction approaches targeting pharmacies have yielded moderate improvements in these outcomes.^{21,25} In the sole study that evaluated an intervention to provide legal medication abortion through pharmacies in Nepal, we found that medication abortion was effective and safe when provided by trained, pharmacy-based ANMs who adhered to the standard of care set forth in national guidelines, including performance of a bimanual exam.²⁶ Because Nepal has thousands of pharmacies, leveraging the accessibility, affordability and confidentiality that these facilities can offer for legal abortion care has the potential to reduce the harm caused by unsafe abortion.¹⁵

As strategies to further expand access to safe medication abortion look toward utilizing networks of pharmacies,^{9,27} it is critical to understand the perspectives and concerns of key stakeholders—including pharmacy-based providers—to ensure efforts are appropriate and collaborative.¹⁷ No studies to date have gathered in-depth data on pharmacy workers' perspectives on the legal expansion of medication abortion provision to pharmacies. In 2014–2015, we conducted the aforementioned quantitative study evaluating whether government-trained ANMs could provide safe and effective medication abortion services in pharmacy settings.²⁶ Clinical procedures at all sites followed the standard Nepali medication abortion protocol, which is consistent with international safe abortion guidelines.⁷ In conjunction with the

evaluation, we conducted, in the same geographic regions, the current study, a qualitative analysis of the perspectives and experiences of pharmacy-based ANMs and pharmacy owners regarding the advantages and disadvantages of legal pharmacy provision of medication abortion. Better understanding of the perceived benefits of and barriers to first-trimester medication abortion in pharmacies is important for informing possible expansion of safe, legal services.

METHODS

Data Collection

We conducted in-depth interviews with pharmacy-based workers, including pharmacists (individuals who have the legal right to work in a pharmacy) and pharmacy owners (those who own and work in their own pharmacies as pharmacists), in two districts of Nepal: Chitwan and Jhapa. Both districts are in the country's lower Terai region, which is bordered on the south by India. In each district, we used purposive sampling to select—from both semi-urban and rural sites—individuals with potential involvement in medication abortion provision. Specifically, we contacted pharmacy owners and ANMs who had taken part in the quantitative study (and had received, as a result of their participation, temporary legal certification from the Ministry of Health to provide pharmacy-based medication abortion), as well as nonparticipating pharmacy owners selected from the researchers' and participating ANMs' professional contacts. If the selected individuals were interested in participating in the qualitative study, an in-depth interview was scheduled. To capture a range of perspectives, we aimed to interview 15–20 pharmacists and pharmacy owners; our final sample consisted of 19 respondents.

An interview guide was developed in English by the study investigators, translated into Nepali and then pilot tested with three providers at the maternity hospital in Kathmandu. Topics focused on overall impression of pharmacy provision of medication abortion services and on possible expansion of legal abortion provision to pharmacies, including views on the benefits of and barriers to pharmacy provision and on the management of complications and referrals. Follow-up probes were used to gather nuanced information on care delivery in pharmacy settings. Members of the study team who conducted the interviews received two days of orientation and training.

Four interviews were conducted in English by one author (R.C.), and the remaining 15 were conducted in Nepali by the Nepali research director. A translator, who was a team member of the study, was present during the interviews conducted in English. All interviews took place in August 2015 in the consultation/exam room of the pharmacy where the participant worked; before each interview, the respondent was informed that he or she could decline to participate or to answer any individual question, and provided verbal informed consent. No provider who was contacted about the study declined to participate. Interviews were recorded with participants' consent and

*Health posts are government facilities that typically employ a nurse or auxiliary nurse-midwife, maternal and child health workers, and a health assistant.

†Abortion is available until 18 weeks' gestation for rape or incest, and at any gestation for fetal anomalies or if the pregnancy poses a risk to the woman's physical or mental health.

lasted, on average, about 30 minutes. Participants were offered a gift worth 1,200 Nepali rupees (approximately US\$12) as appreciation for taking part in the study. Ethical approval was obtained from the Committee on Human Research at the University of California, San Francisco, and the Nepal Health Research Council.

Analysis

The recorded interviews were transcribed, and those conducted in Nepali were translated into English. We used a thematic approach for data analysis. Two coders independently reviewed the transcripts line-by-line to generate initial codes, which were then used by the first author to develop a preliminary codebook. Transcripts were open-coded a second time by both coders to develop more detailed codes and to assess relationships among codes. Transcripts were then coded by hand for content and thematically analyzed by both coders. Related codes were grouped into three categories: benefits to women of pharmacy provision of abortion services, barriers to providing such services and challenges pharmacists faced when providing abortion care.

RESULTS

Profile of Participants

The 19 participants had a median age of 42, and approximately half were female (Table 1). Eleven of the participants were solely pharmacy owners, three were solely ANMs and five were both pharmacy owners and ANMs. Seventeen respondents were currently providing medication abortion services to women requesting them. Two of these respondents would dispense medication only when a woman provided a prescription; the other 15 would independently assess a woman's health and pregnancy and, if appropriate, offer counseling and dispense the medication.

Benefits of Pharmacy Provision

• *Improved access.* The pharmacy owners and workers saw their role as integral to improving women's access to medication abortion by reducing their travel time and cost. Many respondents stated that making medication abortion available through pharmacies improves access because pharmacies are open longer than government-certified facilities. Others noted that in rural villages, even those far from government-certified facilities, women have easy access to an independent pharmacy and that the pharmacy is often a first-line resource for medical information and care. One provider explained:

"[Women] used to go to either Narayangadh or Bharatpur to receive abortion services because, in those places, they could have some privacy. So when they [began receiving] the service here, they were able to save both time and money. Here we provide the service [for] 500 rupees, but in other places [women] had to pay 1,400 to 1,500 rupees for abortion alone. Apart from that expense, they had to manage money for food, bus fare. On top of that, it is very difficult to go all by yourself, so one has to

TABLE 1. Selected characteristics of pharmacy owners and workers, Chitwan and Jhapa, Nepal, 2015

Characteristic	No. (N=19)
Sex	
Male	11
Female	8
District	
Chitwan	10
Jhapa	9
Language of interview	
Nepali	15
English	4
Pharmacy owner	
Yes	16
No	3
Participated in quantitative study	
Yes	9
No	10
Education/training*	
Auxiliary nurse-midwife	8
Community medicine assistant	6
Dept. of Drug Administration certificate	4
Auxiliary health worker	2
Bachelor's degree	1
Pharmacy diploma	1
Master of Business	1
Master of Management	1
Master of Public Health	1
School Leaving Certificate	1
Provides medication abortion	
Yes	17
No	2

*More than one may be applicable.

take a friend with her. So [pharmacy provision] saves their money and time, and made the service easily available." —R8, female ANM

Similarly, another female ANM (R13) stated that "if [women] receive medication abortion service from [a] pharmacy, they will not have to travel far." Pharmacy provision, participants agreed, substantially reduced travel time, thereby expanding access for women in their communities.

At the same time, some participants explained that medication abortion can be expensive when provided illegally at pharmacies. Participants who provided medication abortion services through the quantitative study with temporary legal certification were able to offer services for 500 rupees (approximately US\$5); they reported that physicians and pharmacies offering illegal medication abortion services charged a much higher price. As one respondent noted:

"They [people who received services from study sites] have gotten services for cheaper prices and for an affordable price, like only 500 rupees. In other medicine shops, the range of prices is like 1,000 to 10,000 rupees." —R1, male pharmacy owner

• *Greater privacy.* Respondents stated that the pharmacy setting provides more privacy than a government-certified health center. Whereas at government health centers,

several staff members might be assisting patients at any given time, independent pharmacies are often staffed by one person, thereby offering more privacy. Participants who provided medication abortion services reported that women were sometimes uncomfortable discussing reproductive concerns in government health centers, but as a male pharmacy owner (R4) noted, “they come to the pharmacy for confidential service.” Most respondents mentioned that the availability of a private room for counseling and examination—a typical set-up for Nepali pharmacies—also helps to ensure confidentiality. For example, one stated:

“[Women] feel awkward when sharing their things [private information about their pregnancy] with us. So we assure them that their things would be kept confidential, and we will not share them with others. I make them feel at home and tell them that once we are out of the room, then we will be like sisters. In this room we are doctor [and] patient, but outside the door, we are like sisters. I tell all these things and assure them about privacy and confidentiality.”—R3, female ANM and pharmacy owner

Those dispensing abortion medication in the pharmacy setting were proud that they could offer additional privacy and confidentiality to women. They expressed the sentiment that pharmacy workers and owners could offer confidential services while maintaining close ties with women in their communities.

• *Provision of safe and effective services.* Medication abortion providers in pharmacy settings also expressed confidence that they delivered safe and effective services to patients, and, in particular, provided a safe alternative in regions where women had limited access to formal abortion care. The providers felt that women faced significant barriers to abortion access under the existing system and viewed provision of medication abortion as a service to women and their community. Respondents said that certain women, particularly those who are not married, face especially significant barriers, and are at risk for not receiving medication abortion and for facing the consequences of an unwanted pregnancy. For example, an ANM who had been providing medication abortion for six years at a health post noted:

“Unmarried girls never visit the health post to receive medication abortion, because the health post doesn’t provide this service to unmarried girls. Unmarried girls might do anything [if they cannot obtain an abortion]. They might commit suicide or go to expensive places to receive abortion service. That will cost them a lot. So it is really necessary to provide medication abortion service in the pharmacy.”—R8, female ANM

Participants explained how pharmacy provision of medication abortion helped these young women and should be expanded. An ANM and pharmacy owner from Chitwan offered representative comments:

“It would be better if we could provide this service [medication abortion] in the rural areas. Due to different reasons, women have unwanted pregnancies. In the

absence of [abortion] services, despite the difficulties of rearing an unwanted baby, they will have to deliver the baby. They will not be able to provide education to their baby. But they will not have any other option except for giving birth.... So, if this service is made available in the rural areas, they will not have an unwanted birth.”
—R3, female ANM and pharmacy owner

Participants also felt that if young women could not obtain a package of mifepristone and misoprostol, they would attempt to terminate their pregnancy using methods that were less effective or were unsafe. One provider noted some of these potentially dangerous approaches:

“Basically, the traditional options, they are horrible. [They include] one of the leaves, leaf gum. Or two or three persons pushing on the stomach, then pull[ing] out, push[ing] out. A lot of those things are practiced. There’s a kind of medicine, albendazole [dewormer], people use against pregnancy, a lot of it—four tablets, five tablets, six tablets at a time. They can get induced [using] other medicines.”
—R2, male pharmacy owner

Pharmacy owners and workers believed that they were integral to helping women obtain safe medication abortion and avoid the consequences of traditional options and unwanted pregnancy. Participants also reported that women were typically satisfied with the medication abortion services that they provided. The service providers viewed word-of-mouth referrals as a reflection of high-quality service.

Several respondents provided medication abortion services concurrently in pharmacies and government-certified facilities. Others had received medication abortion-specific training in addition to their pharmacy or health worker training. A male pharmacy owner (R7) stated that the safety of care did not differ according to where it was provided: “If a person is capable [of providing medication abortion], then they are capable [of doing so] in a [pharmacy] as well as in a clinic.” Participants who offered medication abortion services through independent pharmacies were highly aware of their role in providing women’s health care and in alleviating the impact of undesired pregnancy on women and families.

Current Challenges of Pharmacy Provision

• *Referral systems for complications.* Pharmacy owners and providers named several challenges to providing abortion services through pharmacies, including the lack of an official referral mechanism in the event of complications. While participants acknowledged that they had good informal relationships with physicians and health facilities, they desired a more formal referral system. As one pharmacy owner pointed out:

“There is no referral system from a pharmacy. But from a government facility, we provide clients a referral sheet so [that] it is easy for them. Because there is no system of writing a referral sheet from a pharmacy, it is a bit difficult [for us]. If there were a referral card system for pharmac[ies], it would be very easy for us as well.”—R13, female ANM and pharmacy owner

Although some providers felt comfortable with informal referral mechanisms, others did not. Some providers emphasized that referrals were difficult to manage. For example, one pharmacy owner explained:

“Sometimes when there is a complication, we refer the patients to a certain center. In [some] such situations, the health workers from the referred place do not provide the service to the client properly, as they have the conception that ‘it is not my case.’ And they even send the client back to us. In such cases, it is really difficult to handle the situation. If we were to be able to provide prompt service for unanticipated complications, then even pharmacies would be able to provide quality [medication abortion] services.”—R9, male pharmacy owner

Participants also expressed concern that women who had received an illegal medication abortion would be refused service or treated poorly if they sought follow-up care at a government facility. A pharmacy owner noted:

“Let’s suppose that I call or refer [a client] from here, then [the government facility] will not give a good response. If I send [clients] to meet a specific person in [a] private government [facility], then [they] may not be able to meet the specific person that I told them to meet, so they may not get treatment on time.”—R5, male pharmacy owner

If access to medication abortion in pharmacies were legalized, participants said, then formal referral networks would give women greater access to care. They pointed out that the lack of formal referral systems makes it difficult to manage complications. For example, a female ANM and pharmacy owner (R11) stated that while she had not come across any complications, in cases of excessive bleeding or incomplete abortion, “if there is someone senior to you, then you feel easier to do [more confident doing] the work.” This statement suggests that a referral system would alleviate some of pharmacy-based ANMs’ fears about complications, which could be handled at a clinical facility with more clinical oversight. While participants preferred a formal, legal referral mechanism, some, such as the pharmacy owner quoted below, also noted that they can send women with complications to hospitals to get care:

“If it is more than nine weeks [of gestation], then we can refer [women] to [the appropriate] government hospitals to avoid any unnecessary expense. We can send them to the right place. When they don’t know about [our services], then they don’t come in contact with us. And they [get] unsafe abortions, which results in heavy bleeding and causes problems, and they come with those problems and then I have referred them to hospitals.”—R9, male pharmacy owner

In general, providers noted that complications (hemorrhage, infection, ongoing pregnancy) were rare but did occur. Some pharmacy owners pointed out that women contacted them with concerns or follow-up questions about the medication abortion process only in the event of complications. One explained:

“Now, if there is excessive bleeding, sometimes if the pregnancy continues, sometimes due to pain, women come for follow-up. But if the abortion is complete, they do not come for follow-up.”—R13, female ANM and pharmacy owner

•**Assessment of gestational age.** Participants noted some challenges in assessing gestational age in pharmacies, many of which have a small private space for a pelvic exam, but none of which have ultrasound. All participants who provided medication abortion services calculated gestational age using the patient’s reported last menstrual period. Some providers also confirmed pregnancy with a urine test, and others assessed gestational age by doing a pelvic exam to assess uterine size. In rare cases, if a provider was unable to estimate gestational age (e.g., because of obesity or fibroids), he or she would refer the patient for ultrasound prior to offering the medication abortion. As one ANM and pharmacy owner explained:

“The first thing that we do is take a history. Only if the fetus is [less] than 63 days, the medical abortion is provided.... Sometimes if the fetus size is bigger than expected as per history, complications may arise to [the] mother as well. In such cases, we give [abortion medication only] after [a uterine sonogram].”—R16, female ANM and pharmacy owner

Assessment of gestational age was often tied to the accuracy of the information the client provided. Participants said that some women (particularly those who were illiterate) were not aware of the date of their last menstrual period. Providers also reported instances in which they believed that women lied about the date of their last period out of fear of being denied abortion care. For example, one provider explained:

“Some women do not remember or have forgotten their [last menstrual period], which may be one reason [for misreporting]. Some lie because we do not give [abortion] medicine to pregnant women of more than two months’ [gestation], and they try to get the medicine by lying to the provider.”—R13, female ANM and pharmacy owner

As the following quote illustrates, some providers also emphasized that they tell clients the consequences of providing inaccurate information:

“I give them instructions first, before starting the medication. [I say to them,] ‘If you tell the truth to me, you can get the medicine, if it is the right choice for you. If you are lying to me, it is not failing me, it is failing you. If you are not using the medication right, then you need to do other things.’”—R2, male pharmacy owner

•**Need for ongoing training.** Several providers mentioned that “refresher” training on medication abortion and complication management would be beneficial, as they might need ongoing education to have the most current information. Because guidelines evolve, some specifically expressed a desire to remain up-to-date with current protocols. As one pharmacy owner said:

“To provide [medication abortion] service effectively, service providers should be updated on changes taking place within this sector and service area. For instance, they should be provided an orientation on new progress. The

information should be imparted through telephone, newspaper, posters, etc. It would be better if...the orientation [was provided] every six months. That would make our work easier.”—R3, *female ANM and pharmacy owner*

However, some respondents expressed concern that not all independent pharmacies could safely provide medication abortion services because of inadequate staff training, or lack of private space for evaluation and counseling. Several participants, most of whom were ANMs, specifically asked for formal training on pelvic examinations, eligibility for medication abortion, complication management and service delivery. Some respondents felt that provision of medication abortion should be restricted to trained providers who had the ability and capacity to do pelvic exams. However, there was no consensus on the credentials that should be required, apart from receipt of medication abortion-specific training.

• **Legalization and expansion of medical abortion.** Nine of the seventeen participants who dispensed medication to induce abortion did so through the quantitative study, which provided temporary legal protection. However, all 17 believed that medication abortion in pharmacies should be legal. For example, one respondent stated that if pharmacies were providing medication abortion anyway—lawfully or not—the service might as well be made legal:

“Even before receiving the training, I [provided] the medicine. After receiving the training, I also gave the medicine. The label, the policy, what goes on, is it legal? Is it better, or legal, to give the medicine or not? It would be better if it is legal.”—R2, *male pharmacy owner*

One participant who did not provide medication abortion lamented that it was illegal for a private pharmacy to dispense medication abortion pills, even if a patient had a prescription from a physician:

“I can get the medication. We provide many types of medication here.... The gynecologist, he has the right to prescribe the medication. And the patient, she has the right to have the medication. Even in these contexts, I am not legally allowed to provide the medication. And that’s a difficult thing for me.”—R18, *male pharmacy owner*

Most pharmacy owners and providers stated that wider provision of medication abortion services would be beneficial, especially in rural areas. As one stated:

“You see, people don’t have access to the [medical] facility in rural areas. So, knowing that, you can have pharmacies that can provide abortion in rural areas, given that there are no government institutions nearby.”—R18, *male pharmacy owner*

Most respondents agreed that nurses and ANMs were qualified to provide medication abortion in pharmacies. Some felt that pharmacists, community medicine assistants (community-level health workers with 12 months of formal training) and pharmacy owners with Department of Drug Administration certification could also provide medication abortion after training, but others felt that experience performing pelvic examinations was necessary. Respondents suggested the government provide

certification to pharmacies that dispense abortion medication and restrict pharmacy provision to certain types of providers (e.g., nurse-midwives), similar to the regulation of government-certified health facilities. One respondent, who did not provide medication abortion, acknowledged that pharmacies could help to increase access, but felt that provision at government health facilities was preferable because those facilities are held to a high standard of care:

“I think that other institutions, the government institutions, will be better [at abortion provision].... There are certain difficulties in pharmacies. Certain parameters they don’t follow closely enough. When you make certain guidelines, if they are followed, it is good. So you take the parameters, and if you follow [them], then you can provide medical abortion. So the institutions [Nepali Ministry of Health], they approve and provide facilities. It’s better to recommend those.”—R18, *male pharmacy owner*

Although some pharmacy owners and providers felt that government facilities currently had a higher standard of care than pharmacies did, all respondents expressed the view that further expansion of medication abortion access through pharmacies, especially in rural areas, was important. Ultimately, the lack of integration of pharmacies into the formal and legal network of providers introduced barriers to care provision that respondents felt affected the safety and quality of services they could provide from pharmacies.

DISCUSSION

In this qualitative exploration of pharmacy owners’ and workers’ views on provision of medication abortion through independent pharmacies, participants were dedicated to providing medication abortion to help women in their communities, were sensitive to their patients’ needs and saw benefits to being part of the formal system of abortion providers. Participants were confident that they could provide safe, confidential services, yet felt that integration into the legal system of abortion provision—which would facilitate the establishment of formal referral networks and ongoing training on evolving medication abortion protocols—would improve the quality of the care they could provide.

Mirroring qualitative work with doctors and nurses in Nepal who provide abortions,²⁸ our study suggests that most pharmacy owners and clinical workers felt comfortable with their knowledge about medication abortion and proud of the services they were providing to their communities. Participants noted that pharmacies have distinct advantages over government health centers for provision of medication abortion, as clients typically travel shorter distances and pay lower costs than they do to reach or receive services at government facilities. In addition, because they are often owner-operated and have a lower patient flow than health care facilities, pharmacies also offer additional privacy, and women seeking abortion likely do not have to tell family members or friends about their reason for travel or need for money. Prior research has shown that privacy

is paramount to women seeking medication abortion and that some women seek a medication abortion without telling family members or friends.^{11,29} Moreover, participants explained that pharmacies remain a first point of contact for many women who are seeking abortions in settings where access to care is limited, a point that has been noted in prior research.³⁰ Because of these advantages, most respondents felt that legal provision of medication abortion services should be expanded to private independent pharmacies, particularly in rural communities. Given that 76% of Nepali women live in rural areas, where women tend to be less educated and literate than their counterparts in urban areas,³¹ medication abortion provision through pharmacies could increase access to care for the most vulnerable women.

To help ensure expansion and safe provision of services, participants endorsed the integration of pharmacies into formal legal abortion networks. In particular, they believed that legalization would help mitigate the potential negative effects of unregulated provision. Delivery of inaccurate information and provision of unsafe or ineffective medications by pharmacists has been documented in many countries,¹⁵ including Nepal.^{11,25} Pharmacy distribution of medications manufactured in factories that do not have quality standards is often cited as a barrier to expansion of safe abortion,³² although participants in our study indicated that women who have complications from medication abortion are likely using unknown substances that they found on their own. Integration of pharmacies into the legal system could aid in regulation and in more consistent distribution of appropriate medications.

Participants also believed that legalization would give them access to proper referral networks. Participants noted that referral systems for complications could help pharmacy workers refer women for ultrasound when gestational age is unclear, and allow them to trust that their patients will receive prompt, safe and effective care at a government facility when follow-up for complications or incomplete abortion is necessary. In an intervention study conducted in Peru of formalized referral networks for STI management, such networks strengthened the connection and communication between physicians and pharmacies, and improved pharmacy workers' recommendations to clients for STI treatment regimens.³³ One review article found that 71% of studies that examined referral networks among informal and formal providers in low- and middle-income countries reported improvements in provider or client behavior or other health-related outcomes.³⁴ In our study, pharmacy workers believed that legal referral networks would provide reassurance that patients would not be denied care should complications arise and would have access to quality follow-up care in government facilities.

Delineating clear evidence-based standards for integration of pharmacies into legal provision will be key to ensuring safe care. Adequate training of providers and certification of pharmacies and health care workers

are attributes of high-quality medication abortion services.^{3,32} Our participants felt that standards for medication abortion provision were frequently being updated and improved,⁷ and that legalization could provide avenues for ongoing training to help them keep up with the latest medical protocols. Training that is reinforced by refresher sessions has the potential to sustain improved patient outcomes. Participants in this study and others have expressed the need for mechanisms to provide certification for pharmacies, yet respondents held varied views regarding the appropriate minimum qualifications for providers and facilities. Several respondents stated that pharmacies without the capacity to perform pelvic exams should not provide medication abortion; however, under certain conditions, provision of such exams prior to medication abortion may not be necessary.³⁵⁻³⁷ Women who are uncertain about the timing of their last menstrual period, or who are at elevated risk for ectopic or molar pregnancy, should have a pelvic exam before medication abortion; however, in most cases, providers will be able to determine gestational age from the last menstrual period and provide access to safe abortion services. Nonetheless, requirements for provider certification and for ongoing training may be necessary to expand legal access to medication abortion through independent pharmacies.⁹

Limitations

This study has limitations. Many of the participants in this study also took part in a quantitative study in which they were trained in medication abortion provision and permitted to legally provide medication abortion services. Thus, they may have been inclined to favor pharmacy provision of medication abortion. Regardless, their views are not representative of all pharmacy-based individuals who may dispense abortion medication. In addition, because participants were recruited through professional contacts of an organization focused on reproductive rights, social desirability may have influenced their responses. Furthermore, pharmacy providers may not have accurate perceptions of the safety of the services that they are providing. Finally, because pharmacy provision of abortion services is not currently legal, some respondents without legal certification may have been reluctant to accurately report their behaviors and beliefs regarding such provision. We should also note that after the completion of our fieldwork, provision of medication abortion became free of charge at certified public facilities in Nepal, thus making the service less expensive than it is in pharmacies.

This study also has many strengths. To our knowledge, it is the first to explore the perspectives of pharmacy owners and workers regarding legalization of pharmacy-based abortion provision. We included both pharmacy owners and ANMs to capture a range of perspectives from individuals who interact with women and provide medication abortion in pharmacy settings.

Conclusion

Taking into consideration the viewpoints of key stakeholders will be critical if medication abortion services are to be expanded beyond traditional clinical settings. In this qualitative study, pharmacy owners and ANMs felt confident of their ability to provide medication abortion in the pharmacy setting. At the same time, they felt the quality of care they could provide for women would be improved and referrals would be streamlined if pharmacy-based providers received systematic, ongoing training and were formally integrated into existing networks of abortion provision. Respondents voiced diverse views regarding appropriate minimum qualifications for provider training and facility amenities if pharmacy provision were legalized. Study findings on provision of medication abortion in pharmacy settings can ensure the success and sustainability of safe medication abortion programs and inform efforts to make medication abortion widely accessible.

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RESUMEN

Contexto: El aborto con medicamentos tiene el potencial de transformar la provisión de servicios de aborto seguro en países de bajos y medianos ingresos y puede proporcionarse con un mínimo de habilidades y equipos clínicos. En Nepal, el aborto en el primer trimestre con mifepristona y misoprostol está legalmente disponible en centros de salud certificados por el gobierno, pero se sabe poco sobre las perspectivas de los trabajadores farmacéuticos con respecto a la provisión en farmacias.

Métodos: En 2015, se condujeron entrevistas en profundidad con 19 dueños de farmacias y enfermeras auxiliares-parteras en dos distritos de Nepal para examinar las opiniones de las personas entrevistadas sobre el aborto con medicamentos y sobre la potencial provisión legal de medicamentos para el aborto en farmacias. Dos codificadores revisaron independientemente las transcripciones y las codificaron y analizaron usando un enfoque temático.

Resultados: Los participantes expresaron su confianza en su capacidad para proporcionar un aborto seguro con medicamentos y consideraron que llenaban un nicho importante al proporcionar servicios asequibles, convenientes y confidenciales a las mujeres en sus comunidades. Vieron los beneficios de integrar a las farmacias en redes de aborto legal en Nepal, como un mejor acceso al aborto con medicamentos y una mayor privacidad. Los participantes también consideraron que la calidad de atención que brindaban podría mejorarse a través de la

capacitación continua de proveedores farmacéuticos y la incorporación formal de dichos proveedores a las redes existentes de provisión de servicios de aborto para simplificar las referencias.

Conclusiones: La integración de las farmacias en el sistema legal de provisión de abortos podría ayudar en la regulación y la capacitación. Tomar en cuenta las perspectivas de los trabajadores farmacéuticos puede ayudar a asegurar la sostenibilidad y el éxito de los programas de aborto seguro.

RÉSUMÉ

Contexte: L'avortement médicamenteux a le potentiel de transformer la prestation des soins d'avortement sans risques dans les pays à revenu faible et intermédiaire. Il ne requiert du reste qu'un minimum de compétences cliniques et d'équipement. Au Népal, l'avortement provoqué au premier trimestre par la prise de mifépristone et de misoprostol est légalement accessible dans les structures de santé agréées par l'État. Le point de vue des employés de pharmacie concernant la prestation en pharmacie n'est cependant guère documenté.

Méthodes: Des entretiens en profondeur ont été menés en 2015 avec 19 propriétaires de pharmacie et sages-femmes auxiliaires dans deux districts du Népal, afin d'examiner l'opinion des répondants sur l'avortement médicamenteux et sur la possibilité de la prestation légale de l'avortement médicamenteux en pharmacie. Deux codeurs ont examiné indépendamment la transcription de ces entretiens, assurant leur codage et leur analyse selon une approche thématique.

Résultats: Les participants étaient sûrs de pouvoir offrir l'avortement médicamenteux sans risques et estimaient combler un créneau important de services abordables, pratiques et confidentiels aux femmes de leurs communautés. Ils percevaient les avantages de l'intégration des pharmacies dans les réseaux de l'avortement légal au Népal, comme l'amélioration de l'accès à l'avortement médicamenteux et une plus grande protection de la vie privée. Les participants estimaient aussi que la qualité de leurs soins pourrait être améliorée par une formation permanente des prestataires rattachés aux pharmacies et par l'insertion formelle de ces prestataires dans les réseaux existants de prestation de l'avortement, pour simplifier les orientations et renvois.

Conclusions: L'intégration des pharmacies au système de prestation de l'avortement légal pourrait faciliter la réglementation et la formation. La prise en compte du point de vue des employés de pharmacie peut être propice à la durabilité et au succès des programmes d'avortement sans risques.

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