Stigma Associated With Medication Abortion Provision Among Pharmacists: An Assessment Of Pharmacists' Knowledge And Practices In Uttar Pradesh, India

Abstract: Most abortions in India occur using medication abortion (MA) outside of health facilities, primarily purchased from pharmacies. In India, males often purchase MA for their female partners. Growing evidence suggests that pharmacists have poor knowledge about MA and provide little, and often inaccurate, information to clients. The aim of this study is to explore differences in pharmacist's interactions with clients purchasing MA based on gender and marital status using mystery clients and a survey of pharmacists. This study was conducted in 3 districts of Uttar Pradesh India, and mystery clients presenting with 4 profiles by marital status and gender. We found overall low outright bias in terms of pharmacists asking clients about age, number of children, religion, etc. However, pharmacists did provide different information to different types of clients, providing less detailed/accurate information to women, especially unmarried women. Addressing pharmacists' potential biases is key for ensuring equitable and quality care.

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Introduction

Abortion has been legal in India since the Medical Termination of Pregnancy Act of 1971 legalized the procedure in a wide variety of circumstances.[1] Despite its long-time legality and the promise of availability in the public sector, many in India find it difficult to access services due to a dearth of trained providers and equipped facilities, a lack of awareness that abortion is legal, and financial barriers.[2–5] In this setting, medication abortion (MA) "combipacks" of the abortion-inducing drugs mifepristone and misoprostol became legal in 2002, and in 2003 became legal outside of facilities with a prescription.[6,7] Despite this regulation, studies in the years following MA's introduction have found evidence that individuals in many states were purchasing the medication without a prescription.[4,8–12] This trend was further confirmed when a recent study of abortion incidence estimated that 73% of the 15.6 million abortions that occurred in India in 2015 were through out of facility MA use.[13]

In these cases, pharmacy workers often serve as the primary point of information for the medication. Though MA is very safe, accurate information is needed to help users know what to expect, what signs of complications to look for, where to get help if needed, and whether the abortion is complete. Studies in several Indian states have found deficiencies in pharmacists' knowledge of MA.[4,8–12]This, in turn, results in pharmacists providing inaccurate or incomplete information to clients seeking MA at their shops.

In India, significant stigma exists around sexual and reproductive health (SRH), including abortion, for women and unmarried adolescents. Studies have found that women in India often do not have full autonomy over health decisions, with a quarter of currently married women reporting that they do not participate in decisions about their own healthcare.[14] Husbands and other family members often wield significant influence on reproductive decision-making, and some abortion providers require the husband's consent before agreeing to perform the procedure.[15–17] Unmarried young women face additional barriers when seeking an abortion, and may delay seeking care.[18,19] They are exposed to SRH messaging and services less than their married counterparts and are at risk for poor SRH health outcomes, with 15-24 year olds accounting for 39% of the maternal mortality in the country.[20,21] While studies have been conducted on barriers to quality abortion care in India, none have examined how gender and marital status play a role in the exchange of information while purchasing MA from pharmacies.

This study was undertaken with the aim of assessing the knowledge and practices of pharmacists providing MA to clients and to explore differential treatment based on gender and marital status.

Methods

This study involves two approaches – a quantitative survey of pharmacists selling medication abortion (MA) and a mystery client visit also known as 'undercover clients' to a sub-sample of the surveyed pharmacists. A total of 283 pharmacists were recruited for the quantitative survey from the urban and peri-urban areas of three districts of Uttar Pradesh – Lucknow, Kanpur and Unnao in Feb 2018. The study purpose was explained and informed consent for the survey as well as for the mystery client visit was obtained.

The pharmacists were interviewed by a team of trained field investigators using a structured questionnaire that included the pharmacist's background, knowledge around medication abortion

that included contents of the combi-pack and its use; gestational limit for MA; directions of use; dosage; side-effects; possible complications; indications of successful abortion and family planning advice to prevent future unintended pregnancies. In addition, information on the MA sales; brands available and average price of the combipack was also obtained.

Subsequently, within a period of three months from the survey, mystery clients visited a sub-sample of 100 randomly selected pharmacies to assess the actual practices of pharmacists while selling MA to clients. The mystery clients presented themselves unannounced as customers (or their partner) who recently missed their period, had a positive pregnancy test, and did not want to continue the pregnancy. They specifically asked about MTP if the pharmacist did not suggest it, and probed about how to take the pills, abortion progression, side effects and possible complications. They noted the quality of information and counseling given.

A team of six researchers (three males and three females) with public health or social science field experience were recruited to play the mystery clients and were trained for three days to ensure that their interactions were as comparable as possible to real clients and were uniform across clients. Between them, they essayed four scenarios: a young unmarried woman, 18-20 years old, not highly educated; a married woman, approximately 30 years old, not very well educated; a young unmarried man, approximately 20 years old and in college; and an older educated married man, about 30 years old. Marital status for women was indicated through the wearing of vermilion or '*sindoor*' on the forehead and '*mangalsutra*' chain (symbols of Hindu married women), and for men it was conveyed to the pharmacist verbally in the course of the mystery client's conversation. Unmarried women also conveyed this verbally to the pharmacist in their conversation. The user profiles and interaction script were informed by the initial results of this study, to ensure that the scenario generated was realistic and reflected the concerns of the user populations. Mystery clients did not purchase the medication from the pharmacists, but rather, after all of the counseling had been completed, asked the price, and declined, saying that they did not have enough money to purchase it.

Immediately after the interview the mystery client was required to complete a short quantitative survey describing the interaction that took place with the pharmacist. Other observations were recorded qualitatively. In case the pharmacist did not provide any advice, the mystery client prompted for information.

Data was analyzed using STATA 15. This paper compares the findings from the pharmacist survey with those of the mystery client interviews to assess the similarities and gaps in knowledge and actual practice as experienced by MCs. The data from mystery client interviews have also been analyzed ttests for differential treatment by gender and marital status. This study received Human Subjects Approval from the University of California, San Francisco and Public Health Foundation of India (PHFI) in India.

Results

Profile of the pharmacists

The pharmacy workers surveyed were males (99%); age ranging from 19 to 75 years and a mean age of 40 years. Only about one fifth had completed a degree or diploma in Pharmacology, but most (87%) had completed college.

Knowledge and practice of medication abortion

From the baseline survey, most (96%) knew mifepristone was for abortion; 64% reported misoprostol was for abortion, 27% for post-partum hemorrhage, and 3% for both. Most (76%) reported that they tell clients about usual symptoms to expect and 44% reported that they told clients what to do if they h ad problems. Most pharmacists reported telling clients how to take MA (92%), and from the mystery client data, 95% opened the box to show clients how to take it, 17%

showed the instructions from the box, and 7% wrote instructions. Fewer mystery clients reported that the pharmacists did not tell them about side effects (14%) than what pharmacists reported about themselves (23%).

While 73% of pharmacists knew the correct timing between mifepristone and misoprostol tablets (24-48 hours), only 18% knew the correct dosing between the misoprostol tablets (no time in between). Overall, 56% of mystery clients were given the correct information about timing between doses.

Do Pharmacist treat clients differentially?

From the survey, 52% of pharmacists reported that they tell women with 1 or no children that they should continue the pregnancy. Overall, mystery clients reported very low levels of outright stigma, as measured by pharmacists asking clients about personal information that could be related to bias. Only 1% of pharmacists asked the respondents age, 3% marital status, 0% religion or caste, 1% education, 7% the number of children the respondent had, 1% if the partner knew they were using MA (for the female clients) and 1% if they had permission from their partner (female clients). Almost none (2%) welcomed the mystery client when they entered, none asked if they had questions at the end of the interview, and most spent between 5-15 minutes with the mystery client. In notes post-interview, mystery clients mostly reported that the providers treated them well and were friendly. Many pharmacists also offered to sell the mystery client pain medication and only three offered to sell them family planning. When mystery clients gave their excuse to leave the shop without purchasing MA, pharmacists almost universally immediately offered to give them a discount on MA.

The magnitude of differential treatment by gender suggests that pharmacists preferred providing information to the same gender (males) as compared to the female counterparts (Table 1). Findings show that pharmacists were significantly more likely to provide information to men on abortion progression and what to do and where to go in case of complications, as compared to female clients. While they were more likely to advise men on taking miso orally, they were more likely to advise women on taking miso sub-lingually.

There were also statistically significant differences in the questions asked of and information given to female mystery clients presenting as married versus unmarried. Pharmacists were more likely to ask married women how many children they already have as compared with unmarried women. Interestingly, providers tend to discuss about what to do if problems occur less frequently with married women (Table 2).

A similar trend was observed when unmarried women remained the most differentially treated group by the pharmacists in terms of sharing critical information about safe consumption of MA. Information on normal progression of MA, what to do in case of problems, correct information on spacing between mifepristone and misoprostol were less frequently discussed with unmarried women as compared to the rest of the profiles. Pharmacists differentiated between unmarried women and rest of the profiles. Unmarried women were told to take miso orally more frequently and were asked more frequently about past MA consumption (Table 3).

Discussion

This study has corroborated others throughout India that have demonstrated that pharmacists often lack sufficient knowledge to provide clients the information they need for the MA process. Until now, no research has been conducted on how this information dissemination and interaction may be mediated by the gender and marital status of the client. Our study suggests that though outright

stigma may be low, pharmacists may provide differing levels of information and alter their questions based on the client's identity. Pharmacists, who in our study were predominantly male, may feel more comfortable relaying information on MA use to male clients, and less comfortable providing thorough information to younger, unmarried women. As researchers and implementers test new methods for improving pharmacist knowledge and information provision, attention will have to be paid to stigma and discrimination reduction among pharmacists. Although this study was limited to one region in one state of India, these findings likey are appliable to other parts of Uttar Pradesh and semi-urban areas in Northern India more generally, given similar social and cultural practices. Recent evidence of the magnitude of MA provision in pharmacies in India suggests that addressing gaps and biases in information provided by pharmacists is essnetial for ensuring safe abortions.

Tables 1: Comparison of information to female vs. male mystery MA clients

Female vs Male mystery clients	ttest	Direction of difference
Described normal progression of MA	0.0059	Told men more often
Provider told what to do if problems	0.0086	Told men more often
Provider told where to go if problems with MA	0.0590	Told men more often
Provider told to take Miso orally	0.0723	Told men more often
Provider told to take Miso sublingually (small N)	0.0723	Told women more often
Gave correct info on mife/miso time spacing	0.0123	Gave correct info to men more

Tables 2: Comparison of information to married vs. unmarried mystery MA clients

Married vs unmarried	ttest	Direction of difference
Ask number of exisiting children	0.0033	Less frequently
Provider tell what to do if problems	0.0319	Less frequently
Provider told to take Miso orally	0.0777	More frequently

Tables 3: Comparison of information to unmarried female vs. all other mystery MA clients

Unmarried woman vs other	ttest	Direction of difference
Ask if she had taken MA before	0.0579	More frequently
Describe normal progression of MA	0.0003	Less frequently
Provider tell what to do if problems	0.0188	Less frequently
Provider told to take misoprostol orally	0.0017	More frequently
Gave correct info on timing between mifepristone and misoprostol	0.0253	Less correct info

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