

Evaluation of Pharmacists' Services for Dispensing Emergency Contraceptive Pills in Delhi, India: A Mystery Shopper Study

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ABSTRACT

Background: Although emergency contraceptive pills are available over the counter, the quality of consultation, including key areas of contraceptive counseling and prevention of sexually transmitted infections (STI), has not been well documented. **Objective:** To evaluate actual pharmacist services while dispensing emergency contraception through a mystery shopper technique. **Material and Methods:** This cross-sectional study was conducted in 81 pharmacies situated in Delhi by 4 trained mystery shoppers posed as customers over a period of 6 months. **Results:** None of the pharmacists asked about the time lapsed since last unprotected sexual intercourse or last menstrual period before deciding the eligibility of the customer. The majority were unclear about side effects associated with emergency contraception (78.57%) or with anticipated changes in menstrual flow (78.57%); 85.71% did not know whether subsequent unprotected intercourse would be protected. Only 15.71% counseled shoppers regarding risk of STI on asking leading questions and 88.5% did not provide any contraceptive advice. **Conclusion:** There is a huge gap in the technical knowledge and mindset of the pharmacists when it comes to checking for the eligibility of the client and providing advice regarding use of regular contraception and barrier for protection from STI, which needs to be addressed in order to realize the full benefit of making emergency contraceptive pills available over the counter.

Keywords: Emergency contraception, mystery shopper, pharmacists

Introduction

Emergency contraception refers to a back-up method for contraceptive emergencies that women can use within 72 h of unprotected intercourse to prevent an unwanted pregnancy. Emergency contraception has been made available over the counter since 2003 for widespread accessibility by the Government of India.⁽¹⁾ According to the service delivery guidelines of the Ministry of Health and Family Welfare, Government of India,

all providers dispensing emergency contraception should be appropriately informed about emergency contraception and should also counsel their clients on regular contraceptive usage.⁽¹⁾

Currently, most of the couples seeking emergency contraception find it easy and convenient to obtain it

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from a pharmacy instead of approaching a health care facility. Therefore, the present responsibility of the pharmacist does not lie merely in dispensing emergency contraception, but they also need to provide relevant drug information and appropriate counseling to their customers regarding regular contraception along with its correct use and the prevention of sexually transmitted infections (STI). Pharmacists have the potential to fill the gap created due to the shortage of doctors and nursing personnel in health facilities. However, in India, they do not have any preestablished norms on competencies or quality of services, and unlike in many developed countries, there is no system of evaluating a pharmacist's competency. A few previous studies have evaluated the knowledge and practices of pharmacists through surveys of pharmacists and other service providers^(2,3) but there is no published study that assesses the quality of pharmacists dispensing products for emergency contraception in India.

Mystery shopping is a technique that can be utilized in the health care industry to assess the quality of service and compliance with regulations.⁽⁴⁾ The mystery shopper's identity and purpose are generally not known by the facility that is being evaluated. In this study, the mystery shopping technique was used to evaluate actual pharmacist services while dispensing emergency contraception in Delhi, India. This study had an added advantage over a survey of the pharmacists as it exposed the actual behavior of the pharmacists with their customers, which was unlikely to be self-reported by the pharmacists.

Material and Methods

This cross-sectional study was conducted in 81 pharmacies. Out of a total of 9 districts in Delhi, 4 were selected for conducting the study by drawing lots. From each of these 4 districts, 20 pharmacies were selected as per convenience for conducting the mystery shopper study, to have a uniform representation. Four mystery shoppers were trained to visit and complete the data on a prestructured *proforma* without disclosing their identity. Out of these 4, 2 were adults and 2 were teenagers. One adult and 1 teenager was a male. This was done to observe the attitude of the pharmacist to different age groups and genders. All interviews were carried out on Saturdays 4 PM-6 PM. The day and time was chosen so that the pharmacies were not crowded and this confounding factor would not affect the time devoted by the pharmacist. Additionally, if there were customers in the pharmacy, the mystery shopper waited till at least one of the persons dispensing medicines was free before approaching the pharmacist.

Guidelines provided by the Ministry of Health and Family Welfare, Government of India⁽¹⁾ were utilized

while structuring the *proforma* to compare the expected with the actual practices of pharmacists while dispensing emergency contraception products. The *proforma* included questions that should ideally be asked by the pharmacist before dispensing emergency contraception. In anticipation of the consultation provided by the pharmacist, the mystery shoppers were instructed to provide a uniform scenario, i.e., last menstrual period at being two weeks back and time elapsed since unprotected sexual intercourse as 48 h. However, if the pharmacist did not ask any questions or provide information, leading questions were asked by the shopper. All advices by pharmacist to the customer regarding the drug, its side effects, measures for preventing side effects, ongoing or subsequent use of contraception, measures to prevent STI, and screening were also documented. At the end of the interview it was enquired whether the dealing person was a qualified pharmacist. Responses from pharmacists were documented in the *proforma* as soon as the shopper left the pharmacy. This *proforma* was pretested in 10 pharmacies before initiating the study. As this study did not involve any patients or patient's records, the Institutional Ethical committee intimated that ethical clearance was not required.

Results

A total of 81 pharmacies were approached over a period of 6 months. All pharmacies included in this study were situated in Delhi. Eight (9.87%) pharmacies were part of a chain and 5 (6.17%) were hospital-owned pharmacies. The rest were privately owned individual pharmacies. Fifty-seven (70.37%) shoppers were entertained by pharmacists and 24 (29.63%) were entertained by untrained staff. Twenty (24.69%) of the interviews were conducted by teens and 61 (75.30%) by adults. Seventy pharmacies (86.41%) provided emergency contraceptive. Two (2.46%) pharmacies refused to entertain over-the-counter sale as they were attached to a clinic or hospital. Nine (11.11%) pharmacies informed that drug was out of stock. Therefore, for analysis these 11 pharmacies, which did provide emergency contraception, were not considered, and the results have been considered for 70 pharmacies only where some consultation could be done.

The attitude of pharmacists was pleasant in 31 (44.2%) pharmacies, judgemental or critical in 16 (22.8%), and indifferent in 23 (the rest; 32.8%). Conversation took place in privacy in only 33 (47.14%) pharmacies. Time devoted for transaction and counseling was only 2 min or less in 34 (48.57%), and 23 (32.8%) spent 2-5 minutes. Thirteen (18.57%) pharmacists had discussions with customers and devoted 5-10 minutes.

Ten out of twenty (50%) pharmacists asked the age of the client when the interview was being conducted by teenagers. Age was not asked in any case when the

shopper was an adult. Other than this, the age and gender of the mystery shopper did not influence the duration or quality of interview of the pharmacists. Responses of the pharmacists during the interview are depicted in Table 1. None of the pharmacists asked about the time lapsed since last unprotected sexual intercourse or last menstrual cycle before deciding the eligibility of the client for emergency contraceptive. When asked leading questions by the shopper, only 9 (12.8%) informed that emergency contraception would not take care of unprotected sexual intercourse prior to 72 h. None of them suggested repeating the dose if vomited within 2 h of intake or that it could be repeated after taking an antiemetic. When the shopper enquired regarding the side effects, 55 (78.5%) claimed ignorance. The rest suggested that the shopper consult a doctor for more information. Five (7.14%) explained that emergency contraceptive pills were totally safe even if consumed several times. Most pharmacists were also not sure about the risk to the fetus in case the shopper was pregnant.

Only 11 (15.71%) counseled shoppers to meet a doctor and use condoms to avoid STIs [Figure 1] and 8 (11.4%) pharmacists advised them to use condom for future contraception [Figure 2].

On asking about its effect on the next period, 5 (7.14%) explained that the period will start soon after intake of this drug. The rest of the pharmacists were not aware of its effect on periods. On questioning by the

shopper, only 10 (14.28%) pharmacists informed the shopper that this medication would not be effective on subsequent unprotected sexual intercourse. The rest of the pharmacists showed ignorance over this issue.

Discussion

The availability of emergency contraception over the counter was a major step in the reduction of unplanned pregnancy and its associated complications. It has been observed that access through pharmacies overcomes the problem of lengthy and sometimes costly consultations and ensures faster availability of emergency contraception.⁽⁵⁾ A recent, systematic review on the impact of increased access to emergency contraception observed that the greatest health benefit of emergency contraception may be achieved indirectly by health workers counseling women at the time they present for procuring these pills to improve use of their current method or change to a more reliable method.⁽⁶⁾ The quality of pharmacist consultation and how it may influence subsequent risk-taking behavior has not been assessed adequately. The present study has raised certain issues and concerns regarding over-the-counter sale of emergency contraceptives. It was alarming to note that nearly one-third of pharmacies were manned by untrained staff. Although the knowledge and suggestions given by the trained pharmacists were more appropriate than those provided by untrained staff, the difference was not statistically significant.

Table 1: Responses of pharmacists for leading questions by mystery shopper

Questions asked by mystery shopper	Responses by pharmacists (N = 70)
Risk of pregnancy in case of other unprotected sexual intercourse in the same menstrual cycle prior to 72 h?	None of the pharmacists asked; 9 (12.8%) informed that risk of pregnancy is present if there is any previous unprotected sexual intercourse
Dose and schedule explained?	51 (72.85%) asked shopper to take emergency contraception as soon as possible within 72 h, 4 (5.71%) asked shopper to wait till bedtime, 15 (21.42%) informed it could be taken anytime unrelated to time frame
Instructions for intake of emergency contraception?	11 (15.7%) suggested emergency contraception to be taken after meal to curb nausea, 5 (7.14%) asked the shopper to take it only after dinner, 54 (77.14%) did not suggest anything related to meals
Suggestion to repeat if vomited within 2 h	None (0%) offered this advice
Suggestion to take antacid/antiemetic?	Antacids were suggested by 18 (25.71%), none suggested to take antiemetic in case of nausea
Any other side effect of emergency contraception?	8 (11.4%) informed about menstrual problems, 1 (1.42%) infertility, 1 (1.42%) headache; 5 (7.14%) told that emergency contraception does not have any side effect at all and can be repeated frequently 55 (78.57%) were ignorant about side effects
Information regarding any disturbance in menstrual flow?	5 (7.14%) informed periods will start soon after intake, 55 (78.57%) were not aware of any change in menstrual flow
Will this medication be effective for subsequent unprotected sexual intercourse?	10 (14.28%) informed that subsequent unprotected sexual intercourse would not be protected, 60 (85.71%) showed ignorance on this issue
Whether suggestion for use of contraception given?	8 (11.4%) suggested the use of contraception, all of whom advised to use condoms. Remaining 62 (88.5%) did not give any contraceptive advice
Whether suggestion for STI screening and information regarding prevention are given?	None, 11 (15.71%) informed emergency contraception does not have any role in prevention of STI. and that barrier contraceptives should be used; 59 (84.28%) neither supplied information spontaneously nor answered the query
Whether suggestion to consult a clinician for further information or in case of missed periods given?	32 (45.71%) advised the shopper to consult a clinician for their queries and for further counseling

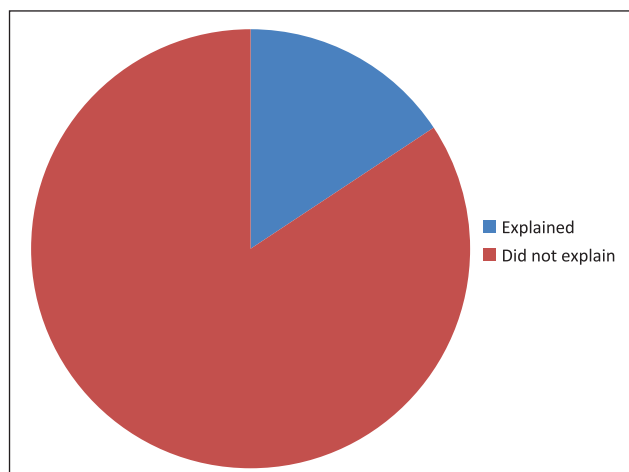


Figure 1: Pharmacists explained risk of sexually transmitted disease

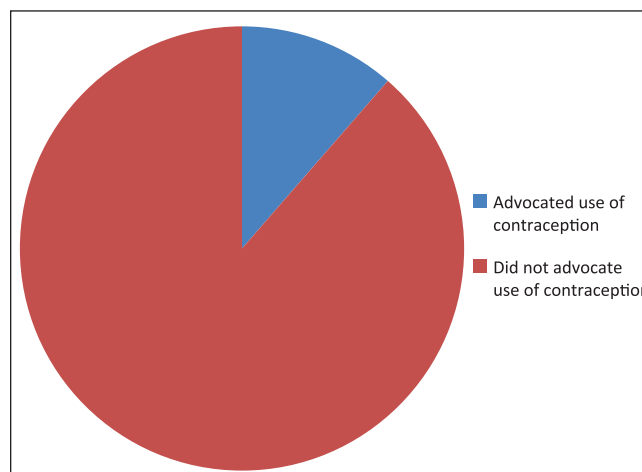


Figure 2: Pharmacists advocating use of regular contraception

The first and foremost concern about emergency contraception is that none of the pharmacists in the study enquired about the timing of unprotected intercourse or last menstrual period to ensure that the woman was not already pregnant. Neither did they enquire about the use of any regular contraceptive methods being used by the customers or any indication of the requirement of emergency contraceptive such as the missing of a pill or the bursting of a condom. Only 11.5% pharmacists came out with the suggestion that regular contraception should be used for routine protection, all of whom suggested condoms. A previous study compared access to emergency contraception through the pharmacy as compared to clinical settings.⁽⁵⁾ It was observed that regular or ongoing contraception was discussed in only 28% of pharmacies as compared to 90.4% in clinical services, and that women felt significantly better informed regarding ongoing contraception while visiting a clinical service.⁽⁵⁾

The prevention and cure of STI is another important issue that needs immediate attention. Only 15.71% of pharmacists suggested that emergency contraceptives would not prevent transmission of STIs and that barrier contraceptives should be used to avoid any risk. In a previous study,⁽⁷⁾ 11 out of 40 pharmacies (41%) suggested that the mystery shopper be screened for STIs, and advice on where to get tested was also offered. Although none of them offered condoms, 4/40 pharmacists recommended condoms for STI prevention. In other studies, too, it had been observed that pharmacists have not given adequate emphasis to the prevention of STI.^(2,3,5)

It was heartening to observe that at least in 50% of the consultations where the shoppers were teenagers, the age of the shopper was enquired and the consultations were also longer. The attitude of the pharmacists was pleasant in 8 (40%), judgemental in 9 (45%), and indifferent in 3 (15%) of the teenage shoppers. It is time to review that the

overenthusiastic advertising of emergency contraception should not spread a contradictory sexual health message to the young population, who are at risk of STI, due to casual sex behavior. It appears that the knowledge of pharmacists regarding the use of emergency contraception is not adequate or up-to-date in order to counsel and advise the customers. This is clearly evident from the responses of the pharmacists in this study. In a previous survey of pharmacists in Delhi, where they were directly questioned regarding their knowledge and practices while dispensing emergency contraception,⁽²⁾ it was observed that 67% of the pharmacists had adequate knowledge, only 3.3% admitted asking about eligibility criteria, none explored the reason for use of emergency contraception or advised their clients for a sexually transmitted disease screening, and only 35% counseled the clients regarding regular contraception. Gaps in the knowledge among pharmacists on emergency contraception have been reported not only from India^(2,3) but also from other countries.⁽⁷⁻⁹⁾

The limitations of this study are that the results cannot be generalized for the rest of the country as this was conducted in only certain areas of Delhi. More interviews had been planned to be conducted by the teenage shoppers, but this could not be done due to logistic problems, and so the services for the teenagers may not depict the true picture.

Conclusion

For society to achieve the desired benefits of over-the-counter availability of emergency contraception, it is important that only qualified pharmacists should be entitled to dispense emergency contraception after obtaining proper information. Regular training or updates may be made compulsory for the pharmacists so that their full potential would be utilized. This will update their technical knowledge and also help

in changing their mindset for improving the quality of their consultations. Some regulatory checks in this regard will also go a long way in assessing their utility and impact on society. Emergency contraception pills should be accompanied with a leaflet informing about other suitable contraceptive options for all age groups and providing correct information regarding their side effects, purpose, correct use, and failure rate in simple style and regional language for increasing awareness.

Ultimately, it is of utmost importance that the pharmacists spread the appropriate message that emergency contraception is only a precaution after a contraceptive accident/unprotected intercourse, only to be used as an emergency, as it does not prevent STI and is not a substitute for regular contraception, which is more efficacious, with fewer side effects.

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Conflicts of interest

The authors have no conflict of interest in the findings of the study.

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