Many Bangladeshi Pharmacies Do Not Provide Accurate Information on How to Use Misoprostol

Pharmacy workers in urban Bangladesh commonly provide medicines and dosing regimens for menstrual regulation that are not effective, according to a cross-sectional survey that used trained individuals posing as clients.[1] When these mystery clients inquired about obtaining a drug to end a pregnancy or induce menstruation, three-quarters of pharmacy workers offered misoprostol, another medication or both. But fewer than one in 10 of those who provided misoprostol recommended an effective dosing regimen for menstrual regulation, and more than seven in 10 did not provide any advice on what to do in the event of complications. In additional, the vast majority of pharmacy workers did not provide post–menstrual regulation family planning methods or refer clients for such services.

Investigators conducted the survey in 2011 in the Mirpur and Badda areas of Dhaka district, and the Sadar area of Gazipur district. They trained young (aged 18–24) and middle-aged (25 or older) male and female mystery clients to approach pharmacy workers and ask about the use of misoprostol specifically or the use of a drug generally for menstrual regulation, either for themselves, a friend or a spouse. (At the time of the study, misoprostol was approved in Bangladesh only for treatment of peptic ulcer and prevention of postpartum hemorrhage.) The mystery clients asked about the availability, cost, dosage, route of administration, effectiveness, adverse effects and complications of any drugs they received, as well as about family planning methods and counseling. Researchers interviewed the "clients" immediately afterward to capture details about the encounter. The investigators computed descriptive statistics and compared differences in study outcomes by characteristics using chi-square tests.

The mystery clients interacted with workers (all of whom were male) at 331 pharmacies. Overall, 76% of clients were offered one or more medications, 23% received information and referrals (usually to a private clinic or hospital) and 2% received neither. When pharmacy workers offered medicines, 39% offered only misoprostol, 16% offered another drug (e.g., emergency contraceptive pills, herbal medicines, hormonal preparations or the combination of methylestrenolone and methylestradiol) and 46% offered both.

Among pharmacy workers who provided misoprostol, just 7% told the client the effective dosage (four pills daily for two days), while the rest gave ineffective ones. Only 32% correctly indicated that the drug should be taken orally, while 65% said that it should be used both vaginally and orally; the remaining 3% indicated that they did not know the route of administration. Only small proportions of pharmacy workers counseled misoprostol recipients about the potential adverse effects of nausea and vomiting (17%), fever and chills (5%) and diarrhea (1%). Nearly half (46%) advised clients that excessive bleeding was a danger sign, but few (4%) counseled clients that fever lasting more than a day might signal infection. Twenty-eight percent of pharmacy workers who offered misoprostol told the clients to go to trained providers in the event of complications, but the rest did not give any suggestion about where to go in that situation. The vast majority (94%) did not provide any post–menstrual regulation family planning methods or referrals.

Provision patterns varied by area and by the nature of the mystery client's request. The proportion of pharmacy workers offering other medicines in addition to misoprostol was higher in Badda (58%) than in Mirpur or Gazipur (42% in each). Workers in Gazipur were about twice as likely as their peers in Mirpur or Badda to recommend using oral and vaginal routes together for misoprostol administration (90% vs. 46–47%). Finally, compared with workers who were asked for a nonspecified drug, those who were asked about misoprostol were more likely to offer misoprostol alone (65% vs. 7%) and to counsel clients that nausea and vomiting are adverse effects of the drug (23% vs. 12%).

Study limitations include potential recall bias and misreporting, the possibility that the mystery client scenarios were unrealistic or aroused pharmacy workers' suspicion, and the findings' questionable generalizability to rural areas, the investigators acknowledge. Nonetheless, although the results show that misoprostol is widely available in pharmacies in the study areas and that pharmacy workers are willing to provide the drug to clients seeking to use it for self-induction of menstrual regulation, they also reveal that workers have "considerable knowledge gaps," the researchers maintain. "Pharmacy workers have the potential to expand access to safe menstrual regulation with medication in Bangladesh in the future, particularly with the recent approval of mifepristone-misoprostol [for menstrual regulation]. Training pharmacy workers and increasing their awareness of appropriate referral networks will help to ensure safe, effective, and quality menstrual regulation services," they conclude.–*S. London*

REFERENCE

1. Huda FA et al., Availability and provision of misoprostol and other medicines for menstrual regulation among pharmacies in Bangladesh via mystery client survey, *International Journal of Gynecology and Obstetrics,* 2014, 124(2):164–168.