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Perceptions and practices of community pharmacists regarding emergency contraceptives in Jordan: A qualitative study

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Abstract

This exploratory qualitative study examines the awareness, perceptions, and roles of Jordanian community pharmacists in providing emergency contraception. Twenty semi-structured interviews were conducted with pharmacists from two major governorates, exploring their counseling practices, knowledge of emergency contraceptives, product differences, concerns, and views on patient requests. Findings show that pharmacists' decisions are influenced by societal stigma, legal constraints, and personal beliefs, with market trends also affecting dispensing practices. The gap was evident in how pharmacists were short on knowing the variety of different types and approaches to emergency contraception. Patient initiative in seeking information significantly mattered and influenced how pharmacists responded to such situations. Also, they reported ethical dilemmas when they handled these medications. Pharmacies in Jordan are so intertwined with community, where people sought to seek pharmacists' help in almost every occasion, proving ever strongly how it makes a difference whether the space is safe and supportive or not, especially for reproductive health issues. Our study highlighted where do we fall short and the need to design programs that fill the gaps in knowledge, perception, and practice. *(Afr J Reprod Health 2025; 29 [3]: 115-124).*

Keywords: Pharmacy; emergency contraceptives; knowledge; perception; practice; jordan

Résumé

Cette étude qualitative exploratoire examine la sensibilisation, les perceptions et les rôles des pharmaciens communautaires jordaniens dans la fourniture de contraception d'urgence. Vingt entretiens semi-structurés ont été menés avec des pharmaciens de deux gouvernorats majeurs, explorant leurs pratiques de conseil, leurs connaissances des contraceptifs d'urgence, les différences entre les produits, leurs préoccupations et leurs points de vue sur les demandes des patients. Les résultats montrent que les décisions des pharmaciens sont influencées par la stigmatisation sociétale, les contraintes juridiques et les convictions personnelles, les tendances du marché affectant également les pratiques de délivrance. L'écart était évident dans la mesure où les pharmaciens ne connaissaient pas la variété des différents types et approches de contraception d'urgence. L'initiative des patients dans la recherche d'informations était importante et influençait la manière dont les pharmaciens réagissaient à de telles situations. En outre, ils ont signalé des dilemmes éthiques lorsqu'ils manipulaient ces médicaments. Les pharmacies en Jordanie sont tellement liées à la communauté que les gens ont cherché à demander l'aide d'un pharmacien presque à chaque occasion, prouvant ainsi à quel point il est important que l'espace soit sûr et favorable ou non, en particulier pour les problèmes de santé reproductive. Notre étude a mis en évidence nos lacunes et la nécessité de concevoir des programmes qui comblent les lacunes en matière de connaissances, de perception et de pratique. *(Afr J Reprod Health 2025; 29 [3]: 115-124).*

Mots-clés: Pharmacie; Contraceptifs d'urgence ; Connaissance; Perception; Pratique; Jordanie

Introduction

Emergency contraception is a crucial choice to have as a back-up plan when contraceptive methods fail, following an unprotected sex, or being sexually assaulted, but they remain underutilized in many countries.[1-3] One of the main factors that might have affected its utilization is the common

misconceptions around this method among healthcare providers.[4,5] Such as believing that they induce abortion convinced that they affect implantation or an established pregnancy, missing the point totally about how they actually exert an effect.[6] Furthermore, having said that pharmacists play a crucial role in providing correct information to people, the lack of proper training and education on emergency contraception is considered one of the most important barriers to overcome.[4,5]

When talking about regions that suffer from inadequate access to reproductive health services, like the Middle East and Africa, a handful of issues can significantly resolve when this isn't the case. Open access to those services can significantly decrease the number of unsafe abortions and associated maternal mortality.[7] In Sub-Saharan Africa, for instance, unsafe abortion procedures account for the highest mortality rates globally, with a staggering 220 deaths per 100,000 procedures, a figure disproportionately affecting women in Africa.[8] Limited access to family planning programs and services including emergency contraception contributed to high rates of unintended pregnancies in these regions.[9]

Here in Jordan, for instance, some of these challenges exists.[10] While there's' an availability of various contraceptive methods such as copper intrauterine devices (Cu-IUD), levonorgestrel 1.5 mg (Navela®), and the yuzpe method, which is defined as the use of high doses of combined oral contraceptive pills containing both estrogen and progestin.[11] Accessibility to these methods is often constrained by factors such as affordability, availability, and cultural attitudes.[12,13] While pharmacists play a critical role in the distribution and education surrounding emergency contraception, misconceptions, particularly about its role in inducing abortion, hinder its widespread use. Studies conducted in several countries like Nigeria and Kenya show that pharmacists' knowledge gaps and misinformation about emergency contraception remain persistent.[14,15]

Drawing comparisons between Jordan and countries such as Jamaica and Kenya—where cultural and societal influences similarly impact reproductive health—provides valuable insights into the broader regional context.[16,17] Both Jordan and these African nations contend with societal misconceptions, limited access to contraceptive methods, and insufficient comprehensive reproductive health education among healthcare providers. By examining these parallels, this study aims to deepen the understanding of barriers to emergency contraception access and to inform policy decisions that will enhance reproductive health education. Accordingly, this qualitative study seeks to investigate how community pharmacists in Jordan respond to women's requests for emergency contraception, evaluating their awareness, perceptions, and roles in ensuring reproductive health.

Methods

Study design, sampling, and data collection

This exploratory qualitative research aimed to explore community pharmacists' awareness, perceptions, and involvement in providing emergency contraceptives through detailed interviews. The interview guide was designed with two sections: the first section gathered basic demographic information, including participants' age, gender, education, years of experience in community practice, and work setting. The second section focused on pharmacists' experiences with counselling on emergency contraceptive use, their knowledge about emergency contraceptives (including different types, effectiveness, and side effects), and their attitudes and perspectives toward these medications in their local context. The semi-structured interviews were conducted with 20 community pharmacists from two major governorates in Jordan (Amman and Irbid), using convenience sampling.

Before conducting the interviews, a pilot interview was carried out with one pharmacist to refine the interview guide and assess the clarity and relevance of the questions. The interviews were conducted in February 2024, with each session audio-recorded after obtaining written informed consent from the participants. The sample size was determined based on the principle of data saturation. Data collection continued until no new themes or insights emerged, indicating that further interviews would not contribute significantly to the understanding of the research questions.

Ethical consideration

The study was conducted in accordance with the World Medical Association's Declaration of

Helsinki guidelines.[18] It received ethical approval from the Research and Ethics Committee at Applied Science Private University (Approval number 2024-PHA-9). Prior to conducting the interviews, participants were informed that their involvement was voluntary and the objectives of the study were clearly explained. Written informed consent was obtained from all participants. They were also advised that they could withdraw from the study at any time. To ensure confidentiality, no names, personal data, or other identifying information were collected from the participants.

Data analysis

The interviews were audio-recorded under deidentified labels and transcribed verbatim for thematic analysis.

The research team then performed a manual comprehensive thematic analysis on all the transcripts to systematically identify and categorize key themes. This involved an iterative process of coding and refining categories to accurately reflect the range of participants' experiences and perspectives. To ensure the validity of the thematic analysis, inter-coder reliability was employed, with multiple team members independently coding a portion of the transcripts to assess consistency in theme identification.

Findings were presented in the results section, accompanied by anonymized quotations from participants identified only by number. This method ensured a balanced representation of views. Where appropriate, the percentage of participants and respective denominators (total or subgroup) for specific themes will be presented. Finally, member checking was implemented to ensure the accuracy and reliability of our interpretations, with participants reviewing and confirming the thematic findings.

Results

Sociodemographic characteristics of the study participants

In this study, 20 community pharmacists were interviewed, with the duration of each interview ranging from 5 to 10 minutes. Participants had a median age of 30 (IQR = 11) and a median of 6 years of experience (IQR = 7.0). Half of the participants were female (n = 10, 50%), 95% (n = 19) held a bachelor's degree in pharmacy, 75% (n = 15) worked in an independent pharmacy, and 60% (n = 12) of the participants were recruited from Amman, the capital. The demographic characteristics of the participants are outlined in Table 1.

Thematic analysis

Qualitative data analysis was conducted to highlight six main domains: experience with emergency contraceptives, knowledge about emergency contraceptives, differences between products, concerns about emergency contraceptives, views on patients requesting the pills, and pharmacists' role in dealing with emergency contraceptives. The main themes and related sub-themes that were observed are summarized in Table 2.

Experiences with dispensing emergency contraceptives

Theme 1: Dispensing emergency contraceptives without prescription

Sub-theme 1: Judgments based on appearance or demeanor

Participants expressed that their decision to dispense emergency contraceptives without a prescription often depended on their personal judgment of the individual's appearance and situation. P1 explained: *"Depending on the case, after ensuring they genuinely need it. We also consider how the person looks, their appearance—whether they seem responsible or perhaps are married—it varies.*" P6 noted: "*Of course, I'm cautious. I wouldn't dispense it just to anyone. My trust in the person's intentions affects my decision on guiding them on how to use the medication*." While P16 added: "*It depends on the case; if we're 100% sure about her intentions and situation, we might dispense it without a prescription."*

Sub-theme 2: Awareness of legal restrictions

Here in this subtheme, there is a significant awareness of legal constrains associated with dispensing emergency contraceptives without a valid prescription. P9 remarked:
"*It's not allowed. Emergency contraceptives are monitored by legal regulations*." Also, P6 referred to a specific drug, Navella®: "*Now, there are new types*

like Navella that need a prescription and are currently controlled."

Table 1: Demographic characteristics of the study participants (n= 20

Code	Age (years)	Gender	Educational level	Experience (years)	Site of work	Governorate
P1	29	Male	BPharm	8	Independent	Amman
P2	53	Male	BPharm	20	Independent	Irbid
P3	31	Female	BPharm	8	Independent	Irbid
P4	44	Female	Diploma	4	Independent	Irbid
P5	26	Female	BPharm	0.67	Independent	Irbid
P6	33	Female	BPharm	10	Chain	Irbid
P7	28	Female	BPharm	3	Independent	Irbid
P8	28	Male	BPharm	6	Chain	Irbid
P9	32	Female	BPharm	3	Chain	Irbid
P10	30	Male	BPharm	9	Independent	Amman
P11	38	Male	BPharm	15	Independent	Amman
P12	27	Female	BPharm	4	Independent	Amman
P13	23	Female	BPharm	5	Independent	Amman
P14	28	Female	BPharm	7	Independent	Amman
P15	38	Female	BPharm	3	Independent	Amman
P16	27	Male	BPharm	2	Independent	Amman
P17	30	Male	BPharm	8	Independent	Amman
P18	45	Male	BPharm	15	Chain	Amman
P19	55	Male	BPharm	20	Independent	Amman
P20	24	Male	BPharm	2	Chain	Amman

Table 2: The main themes and sub-themes observed in this study

Domains	Main themes	Subthemes
Experiences with emergency contraceptives	Dispensing emergency contraceptives without prescription Pharmacist lack of education.	Judgment based on appearance or demeanor.
	Patient initiative.	Awareness of legal restrictions.
	Awareness and accessibility.	Influence of market trends on dispensing practices.
	Ethical stances.	
Knowledge about emergency contraceptives	Awareness about the products.	
	Effectiveness within certain timeframes.	
Differences between products	Products differ in their safety.	
Concerns about emergency contraceptives	Cultural concerns	
	Ethical and religious concerns	
	Professional responsibility concerns	
Views on patients requesting the pills	Non-judgmental attitude and respecting patients' autonomy.	
	Assessing the legitimacy of a request.	
Pharmacists' role in dealing with emergency contraceptives	Patient education.	Educating patients about the proper use and potential risks.
	Avoiding contraindication	
	Avoiding adverse effects	

Sub-theme 3: Influence of market trends on dispensing practices

Despite legal restrictions, some participants noted that market trends influence their practices, occasionally leading to non-compliance. P8 candidly shared:

"*Truthfully, it shouldn't be dispensed without a prescription, but that doesn't mean I never do it*." Also, P20 concluded: "*Yes, this is how it is in the market nowadays."*

Theme 2: Pharmacists' lack of education

Participants revealed that their approach to dispensing emergency contraceptives was significantly influenced by their own lack of education and training in this area. One pharmacist expressed uncertainty when confronted with their first request for such contraceptives, stating, "*Yeah, but I asked a gynecologist what to do in such cases?*" (P9).

Another pharmacist emphasized the educational deficit, remarking, "*No, honestly it doesn't happen, and actually, we are the ones who need to be educated because we don't have a lot of experience with it*" (P18). The lack of training was a common concern, as one pharmacy manager noted, "*Many pharmacists come to me without any idea about the subject*" (P2). Awareness of specific products also varied, "*Yes, because not everybody knows about Microgynon®, especially fresh graduates. So yes, yes*" (P7). Another shared their limited exposure: "*I graduated and worked, and in the three-month training period, I didn't experience such cases. Until now, I hadn't come across a case, so I had to consult a doctor whose number I had*" (P9).

Theme 3: Patient initiative

The extent to which pharmacists engaged in educating women about emergency contraceptives often depended on the patients' initiative to seek information. Several pharmacists described their role as reactive, providing information only when directly asked by the patient. "*If she had any questions, she could ask me*," one pharmacist explained, indicating a passive approach to patient education (P2). Another echoed this sentiment, "*If she comes and seeks some advice, yeah, I advise her*" (P4), suggesting that proactive patient engagement was a prerequisite for providing guidance. The reliance on patient-driven inquiry was further supported by another pharmacist's statement: "*Well, it depends on the patient, I mean, if the patient is interested and there's a discussion …*" (P8), highlighting the conditional nature of their educational efforts.

Theme 4: Awareness and accessibility

Several participants noted that women often come to the pharmacy with a clear understanding of what they want, which affects how pharmacists approach the conversation about emergency contraceptives. "*Honestly, it was rare, because they used to come already knowing what they wanted, that they didn't want to get pregnant*," shared one pharmacist (P9). This sentiment was echoed by another: "*No. Most people know. Most people search for 'Plan B.' It's all over media and TikTok, it is known as Plan B. Most people know*" (P11). This theme underscores that awareness and accessibility are driven by media and online resources, shaping how women engage with pharmacists regarding emergency contraception.

Theme 5: Ethical stances

Ethical considerations heavily influenced the discussions pharmacists had with women about emergency contraceptives. Some pharmacists focused on discussing the potential disadvantages of contraception.

"*So, now, if I want to have a conversation, I will only tell her the side effects"* stated one pharmacist (P10). Another emphasized the risks associated with emergency contraceptives usage: "*I honestly start talking about the disadvantages more than the advantages, to be honest with you*" (P13). Furthermore, the ethical implications of facilitating access to emergency contraceptives were highlighted by another participant: "*No, I don't assure people about these things. I don't assure anyone because first, it's not a toy, alright? So, it's not alright when someone underestimates the situation, a baby's life depends on this, even if only fertilization has taken place, this is a soul anyway, so I don't encourage anyone to use it"* (P12). This theme reveals the complex ethical landscape pharmacists navigate when dispensing emergency contraceptives.

Knowledge about emergency contraceptives

Theme 1: Awareness about the products

The majority of participants, indicated awareness of only two emergency contraceptive methods available in Jordan: Navella® and combination methods such as Microgynon® and Yasmin®. Additionally, three participants were not aware of the recent registration of Navella® in Jordan. One participant shared their outdated information, stating,

"*I heard about it when I was working at my previous pharmacy, but my doctor said it's not authorized*

here in Jordan. That was two years ago" (P4). Another participant stated, *"Whether this product has been approved, no one has ever come and told me about it, no medical representative has ever come to the pharmacy and told me about it. So, I don't know if it has been approved" P12.* Only one participant had knowledge of international products, noting, "*I know one more product, but it is not available in Jordan, Ella 1, it can be used up to 5 days*" (P11).

Theme 2: Effectiveness within certain timeframes

The question of effectiveness after certain timeframes revealed that 70% (14 out of 20) would not dispense an emergency contraceptive after 72 hours of intercourse, doubting its efficacy. "*No, it would be useless, wouldn't it*?" (P7) and "*So, no, honestly. Because we've exceeded the time limit, so there's no need, I mean, for things... I mean, it would be pointless to take it*" (P10) are examples of responses that underscore skepticism about the effectiveness of emergency contraceptives beyond the commonly accepted timeframe. Some participants preferred referring patients to a doctor, "*No, I tell her to consult a doctor. I'm not sure about its efficacy because if it's going to work for her or not, she might end up taking medication for nothing*" (P9).

Differences between products

Theme 1: Products differ in their safety

Concerning safety, eight participants (40%) felt that Navella® was safer than the combination methods Microgynon in term of side effects. One participant elaborated on the differences, stating, "*Another thing is the probability of bleeding is higher in Microgynon*" (P1). Another added, "*Of course, the new contraceptive, Navella®, has much fewer side effects compared to Microgynon. I believe its effects on raising blood pressure and those central nervous system effects, systemic effects, are much less, of course*" (P3).

Concerns about emergency contraceptives

Theme 1: Cultural concerns

The first major theme identified was cultural concerns surrounding the use of emergency contraceptives. One participant reflected on the influence of societal norms and traditions, especially in the context of marriage, stating; "*But listen, we live in a society where customs and traditions influence us. For example, I know she's married, and she doesn't want this or that, you understand? This is another aspect that controls the situation*" (P4). Another participant highlighted the general societal resistance to emergency contraceptives within Arab culture, mentioning, "*In general, within our Arab society, there's a widespread cultural belief that we should avoid using emergency contraceptives. However, it is ethically accepted among married individuals, who use it without experiencing any adverse issues. I'm aware of married people who have used it, and everything turned out perfectly fine for them*" (P10).

Theme 2: Ethical and religious concerns

The second major theme revolves around ethical and religious concerns. Some pharmacists expressed ethical concerns regarding the potential harm to a fetus, especially when the contraceptive is used beyond the recommended timeframe. "*Now, if she exceeds the timeframe, for sure it will cause deformities in the fetus*" (P5). The complex interplay of religious beliefs and professional responsibilities was highlighted by several pharmacists. One expressed no ethical dilemma since, in his view, the spirit has not yet entered the fetus at early stages *"So now, I mean, religiously speaking, it's not like the spirit has been breathed into it yet, so it's okay. I mean, I asked about it, so it's okay, I suppose*" (P10). Pharmacists in the study expressed varied concerns regarding the morality and marital status of women seeking emergency contraceptives. Some pharmacists considered these factors critical in their decision-making process. For instance, one pharmacist, explaining, "*In our area, in the camp, people almost know each other. So, when someone comes to me, I might know if she's married or not. During my time at the pharmacy, a young girl came to request Microgynon. It was clear she was in a relationship, not married. The doctor on duty refused to dispense it, instructing her instead to get tested for pregnancy*" (P4). Another pharmacist emphasized the importance of having the husband present when dispensing such medications, "*It's important to me that her husband is with her*" (P6).

Theme 3: Professional responsibility concerns

During the interviews, many pharmacists drew on the fact that they have a professional responsibility to steer away from doctor's decision regarding how appropriate and useful the use of emergency contraception would be. This theme captured pharmacists' reluctance and hesitation in making decisions when it came to these drugs,
"*No, I tell her to consult a doctor. I'm not sure about its efficacy because if it's going to work for her or not, she might end up taking medication for nothing*" (P9), and "*I won't dispense it on my own responsibility*" (P5). Also, one participant (P13) stated *"It depends on the case, and it all goes back to the doctor. I'm not responsible of the diagnosis, and I'm not responsible to suggest a solution and the diagnosis*.

Views on patients requesting the pills

Theme 1: Non-judgmental attitude and respecting patients' autonomy

This theme captured the handful of pharmacists who adopted non-judgmental approach and respect for patient autonomy. One pharmacist expressed their professional boundaries, saying
"*No, no. Eventually, no. I only ask about the timing and what health issues are there, other than that I'm just a pharmacist and it is none of my business to judge on this person or to formulate any judgments about them*" (P1). This feeling was echoed by others who insisted that personal or moral beliefs should not influence their professional responsibilities. For instance, P3 mentioned, "*Honestly, no. Not me. It's not my business, honestly*," emphasizing a deliberate disengagement from forming judgments based on the patient's appearance or circumstances.
Another pharmacist, P7, described their attitude as "*Neutral. It's okay. If she didn't absolutely need it, she wouldn't come*," suggesting a trust in the patient's judgment and needs. Similarly, P9 expressed a straightforward assumption about marital status and family planning: "*No, I don't care. My thinking always goes like 'okay, she's married, and she doesn't want babies now*.'" The focus remains on providing the necessary service without delving into the personal lives of the patients.
P13 and P20 shared similar views, stressing the importance of non-assumption and maintaining confidentiality. P20 provided a comprehensive view on the matter "*It doesn't affect my dispensing because I don't assume. If it was a morally wrong situation and that's what led them to ask for an emergency, it is better to cover for them. I'm not encouraging anybody. But on the contrary, why making a scandal? Everyone makes mistakes, why exposing them, on the contrary, it is our duty to cover for them. If Allah covers up for our mistakes, who are we not to cover up for each other*?"

Theme 2: Assessing the legitimacy of a request

While many pharmacists strive to maintain a non-judgmental attitude, some reported they still assess the legitimacy of the request in various ways. P17 mentioned using intuition and observation:
"*Now look, the basis of suspicion and doubt let's say… I always try to understand it as a good intention, I mean… sometimes it happens because of illegitimate reasons or somethings like that, so it happens, you know? And sometimes it is apparent from the looks of the person, the way he's asking for the drug, you know? I mean it may appear."* This shows that personal opinions sometimes affect their professional decisions.

Pharmacists' role in dealing with emergency contraceptives

Theme 1: Patient education

The predominant theme identified was patient education, particularly focusing on the proper use and potential risks associated with emergency contraceptives. All participants (n=20, 100%) emphasized the critical importance of timing when discussing the administration of the drug. Participants highlighted that the effectiveness of emergency contraceptives depends significantly on the timing of administration post-unprotected intercourse. P1 explained,
"*I'd inform her that within a 24-hour period we are 99% protected, within 48 hours it is reduced by a third of that, and within 72 hours we cannot make it work anymore."* Similarly, P17 mentioned, "The efficacy of the pill. For example, within the first 24 hours the efficacy is 90%, after 48 hours it becomes a bit less, until 72 hours where it reaches 60%".

Theme 2: Avoiding contraindications

A significant number of pharmacists (n=7, 35%) also focus on potential contraindications that may affect a patient's suitability for emergency contraceptive

pills. Concerns such as predispositions to clots or cancer were mentioned by P1,

"*It's important that they are not prone to clots or to cancer.*" Other pharmacists, like P3 and P4, assess additional risk factors including age, existing diseases, and other health conditions, "*Age, especially over 35 to 40 years old, this age range you know it's contraindicated already, especially if they have migraines, hypertension, it's prohibited, right. Any existing diseases, the diseases she has, how long has she had them*?" and "*I want to make sure if she doesn't have anything conflicting with it. Any chronic illness she has*."

Theme 3: Avoiding adverse effects

Furthermore, some pharmacists (n=6, 30%) address the side effects of emergency contraceptives and offer advice on how to alleviate them. For instance, P3 mentioned common side effects like "*vomiting and nausea and period disruptions*." Others, such as P5 and P7, suggested preemptive measures,
"*It can cause nausea and vomiting, right? So, I might tell her to take something for nausea and vomiting beforehand, like Motilat or Domperidone, half an hour before taking them*," and "*I would also advise to take an anti-emetic half an hour before the pill." P12 and P14 also noted*, "*A strong stomach pain could happen, some people take something to alleviate the pain, but generally it is normal. Also, bleeding is normal*," and "*That she should take something for the vomiting and the nausea that might accompany the pill*."

Discussion

Jordan, a country so deeply rooted in cultural and religious influences, made an excellent field to study and to evaluate regarding emergency contraception. Since emergency contraception is intertwined with the nature of the society, it played a role in shaping pharmacists' views on emergency contraception, especially concerns around unmarried women. A 2016 research in Jordan similarly found that pharmacists were reluctant to provide emergency contraception without a prescription, feeling more confident to dispense it to women they trusted or those with a doctor's prescription.[19]

The ebb and flow of personal moral convictions and professional limitations has moulded pharmacists' practice, confining correct regulatory requirements. The issue necessarily draws upon the tension around contraception, sexuality, and women's autonomy. Studies in other parts of the world have shown pharmacists' decisions are often guided by personal values and cultural norms, that might conflict with professional obligations to provide an unbiased care.[20,21]

Our findings align with global challenges in pharmacy practice, where societal values can hugely influence professional decisions. The gap was evident in how pharmacists were short on knowing the variety of different types and approaches to emergency contraception. Patient initiative in seeking information significantly mattered and influenced how pharmacists responded to such situations. This knowledge gap has been identified in other contexts, such as Nigeria, urban Vietnam, India, and Japan, where inadequate knowledge among pharmacists acted as a barrier to the effective provision of emergency contraception.[5,22-24]

Results also reveals how patients' initiative in seeking information significantly mattered and influenced how pharmacists responded to such situations. This was also observed in Switzerland, where young women seeking emergency contraception often faced challenges when approaching pharmacists due to the stigma and tension that often accompanies the request.[23]

Our study showed that some pharmacists presumed that women know what they are supposed to do and won't offer detailed counselling unless prompted, proving how it would make a difference whether the space is safe and supportive or not,

especially for sensitive issues like the one at hand. Pharmacists have to take decisions daily navigating through the complex moral landscape the society offers, making them face ethical dilemmas constantly. The ethical tension is not unique to Jordan, as other studies have documented the challenges healthcare providers face when societal and personal beliefs conflict with daily situations.[20,25] This emphasizes the necessity of separating personal beliefs with what the situation calls for.

Our findings also highlighted the importance of pharmacists' knowledge about the safety and efficacy of emergency contraception, particularly regarding the 72-hour time window post-intercourse, when most of pharmacists refused to dispense emergency contraception beyond this

timeframe. This cautious approach aligns with findings from other studies that emphasize the need for timely access to emergency contraception for it to be effective.[24,26] This draws on the need for training and clearer guidelines on when to dispense emergency contraceptives and how to handle these cases effectively.

The findings of this study also have broader implications for other regions, particularly in Africa, where societal norms around sexuality and contraception often present significant barriers to reproductive health access.[2] In many African countries, pharmacists play a key role in healthcare, especially in resource-limited settings, and their perspectives on emergency contraception may be similarly influenced by local cultural and religious norms.[24,27] Understanding these cultural dynamics is crucial for improving reproductive health access in similar contexts, and this study provides valuable insights for pharmacists working in under-resourced settings where they are key healthcare providers.

These points have drawn the attention to the need for improved and more detailed education on reproductive health and the development of training programs that enhance women's experience and supporting women in making informed decisions when they seek reproductive health care in Jordan and other regions. Despite high public awareness of contraceptive options, gaps in pharmacists' knowledge are in the way of safe access and timely care.

Interviews were conducted across two main governorates in Jordan, leaving how pharmacists operate in other regions of the country unevaluated. Future research aims to broaden the range of pharmacists' perspectives from different regions, painting a bigger picture of reality. Additionally, despite efforts to achieve data saturation, where no new themes or insights observed from additional data, there may still be unexplored perspectives or nuances that could affect the conclusions. Moreover, although we made efforts to enlist pharmacists spanning various age brackets, the predominance of youthful participants (with a median age of 30) might constrain the applicability of our findings to the broader pharmacist community.

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Competing interests

The authors have no conflict of interest

Data availability

The data that support the findings of this study are available from the corresponding author upon request.

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Contributions of authors

Conceptualization: all authors; Data curation: D.J.; Formal analysis: all authors; Methodology: all authors; Project administration: R.A.; Supervision: R.A.; Validation: all authors; Visualization: all authors; Roles/Writing - original draft: all authors; and Writing - review & editing: all authors.

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