

# The pill and the profession: the evolving role of pharmacists in oral contraceptive access for women in South Africa

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## Abstract

Oral contraceptives (OCs) play a key role in reproductive health and family planning, yet their use and accessibility in South Africa remain shaped by sectoral dynamics, socioeconomic factors, and persistent systemic barriers. Nationally, the prevalence rate of contraceptive use is estimated at around 60% among women of reproductive age. Injectables dominate public-sector provision while OCs are more frequently accessed in the private sector. Within the public sector, free combined oral contraceptive (COCs) and progestin-only pill (POPs) are available, although counselling and patient support are often limited. In contrast, the private sector provides a wider range of formulations, including extended-cycle regimens, but affordability and medical aid coverage remain decisive factors. Certain (emergency contraception) ECs are legally available for non-prescription access in community pharmacies, yet studies indicate poor awareness and low utilisation among adolescents and socioeconomically disadvantaged groups. Pharmacists are strategically positioned as accessible healthcare providers, offering both dispensing and counselling services. However, their role is undermined by limited training recognition, regulatory restrictions, and stigma surrounding EC provision, often reinforced by overly restrictive Good Pharmacy Practice (GPP) requirements. Contraceptive use often comes with complications such as adherence difficulties and side-effects like nausea and breakthrough bleeding, as well as risks such as venous thromboembolism (VTE). Despite these challenges, pharmacists express readiness to expand their role within primary health care, aligning with South Africa's broader shift toward universal health coverage. This review highlights the importance of strengthening pharmacist-led contraceptive management through policy reform, structured training, and multidisciplinary collaboration to improve reproductive health outcomes for women.

**Keywords:** oral contraceptives (OCs); emergency contraception (EC); pharmacists' role; contraceptive accessibility; reproductive health; South African women; contraceptive challenges

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## Background

While OCs remain among the most widely used for reproductive health and family planning, their accessibility, and associated challenges such as affordability, low utilisation among adolescents and poor awareness in socioeconomically disadvantaged groups vary widely across contexts.<sup>1</sup> In South Africa, the prevalence rate of contraceptive use among women aged 15–49 is estimated at around 60%. However, mixed-method contraceptive use remains skewed, with injectables dominating public-sector provision, while oral contraceptives are more commonly accessed in the private sector.<sup>2–4</sup> In South Africa, OCs are available in both the public and private sectors, but the patterns of use differ. In the public sector, free contraceptives are dispensed primarily through clinics, where injectables, COCs and POPs are provided. In the private sector, community pharmacies stock a wider variety of brands, including extended-cycle formulations, but cost and medical aid coverage can influence patient choice.<sup>3</sup>

The levonorgestrel-based emergency contraceptive pills are the most commonly used and are legally available for non-prescription access in pharmacies.<sup>5–7</sup> Although the Yuzpe method played an important historical role, it is now rarely used reflecting the shift towards more convenient and better-tolerated methods.<sup>8</sup> However, studies indicate that awareness and utilisation remain

low, particularly among younger women and those in lower socio-economic groups.<sup>9</sup> Pharmacist knowledge of EC has also been shown to vary: a Soweto-based survey revealed that while most pharmacists were willing to provide EC, many were uncertain about its mechanism of action, timing, and safety profile.<sup>10</sup> Despite the wide availability of OCs in community pharmacies, there is evidence of significant knowledge gaps among both patients and providers with respect to correct use, side-effects, and EC.<sup>11</sup>

Pharmacists, as accessible healthcare professionals, are well positioned to enhance contraceptive care in the urban areas;<sup>12,13</sup> which is not the case in rural communities, given the challenges rural households face in accessing healthcare services, as highlighted by the General Household Survey.<sup>12,14</sup> Furthermore, systemic barriers such as limited counselling opportunities, regulatory constraints on prescribing, and lingering stigma surrounding EC continue to limit the extent of their involvement. The National Contraception Clinical Guidelines of South Africa explicitly promotes a rights-based and patient-centred approach to contraceptive care by emphasising the importance of informed choice as a key principle of contraceptive service delivery. The clients must be provided with full, accurate, and unbiased information to make voluntary and informed decisions about contraception use.<sup>22</sup> This review aims to discuss the types of OCs available in South Africa, highlight

Table 1: Overview of emergency and routine contraceptive methods (INN based)

Therapy type	International non-proprietary name	Trade Name(s)	Dosage	Mechanism of action	Considerations
Name(s)	Levonorgestrel	E.g. NorLevo®	1.5 mg dose taken orally as soon as possible after unprotected sex (≤ 72 h but can be used up to 120 h).	Levonorgestrel works by inhibiting ovulation by suppressing the luteinising hormone (LH) surge that occurs during ovulation. <sup>24</sup> It can also thicken cervical mucus, which prevents sperm penetration. <sup>25,26</sup>	Available over the counter (OTC). Does not require a prescription. Does not interrupt implantation once it has occurred. <sup>25,26</sup>
	Ulipristal acetate	E.g. ellaOne®	30 mg single oral dose within 120 h.	Ulipristal acetate is a selective progesterone receptor modulator (SPRM), which inhibits ovulation even after the LH surge has begun. <sup>24,27</sup>	Higher efficacy for obese women compared to Levonorgestrel. <sup>28,29</sup> Requires a prescription, but currently not available in South Africa. <sup>28,29</sup>
Combined oral contraceptives (COC)	Ethinylestradiol+ Levonorgestrel	E.g. Triphasil®, Nordette®	1 tablet taken orally for 21 days, followed by placebo pills for 7 days.	Suppresses ovulation by inhibiting both follicle stimulating hormone (FSH) and LH. <sup>30</sup> Endocrine negative feedback loop that prevents ovulation. <sup>26</sup>	Provides both contraception and menstrual regulation. <sup>30</sup> Not recommended for smokers > 35 years. <sup>30,31</sup> Requires a prescription. <sup>32</sup> Contraindicated in patients with a history of venous thrombosis. <sup>33</sup>
	Drospirenone+ ethinylestradiol	E.g. Yaz®; Yasmin®, Eloine®	1 tablet taken daily for 28 days straight with 7 placebo pills.	A synthetic progestogen with anti-androgenic and mild diuretic properties. <sup>26,34</sup> When used with ethinylestradiol in COCs, it suppresses ovulation by inhibiting gonadotropin release. <sup>26</sup>	Contraindicated in patients with a history of venous thrombosis. <sup>33</sup> Contraindicated in patients with uncontrolled hypertension. Provides benefits such as reducing acne and fluid retention. Requires a prescription.
	Ethinylestradiol+ dienogest	E.g. Qlaira®	1 tablet taken daily for 28 days in a specific sequence (26 active tablets and 2 placebo pills).	Ethinylestradiol+ dienogest is a fifth generation COC, it works by inhibiting ovulation by suppressing gonadotropins. <sup>24,30</sup>	Regulates the menstrual cycle. <sup>30</sup> Requires consistent daily use. <sup>26,30</sup> Converts to natural oestrogen which is better tolerated by many women. <sup>26</sup> Requires a prescription. Contraindicated in patients with a history of venous thrombosis. <sup>33</sup>
Combined oral contraceptive (COC)-extended cycle	Ethinylestradiol/ cyproterone acetate	E.g. Diane-35®, Minerva®-35	1 tablet taken daily for 28 days.	Endocrine negative feedback loop, that suppress FSH and LH release. <sup>26</sup>	Requires a prescription. Can be used in the treatment of acne and poly cystic ovarian syndrome (PCOS). Contraindicated in patients with a history of venous thrombosis. <sup>33</sup>
	Ethinylestradiol+ Levonorgestrel	E.g. Ovral®	Initially take 2 tablets and repeat 12 hours later. <sup>28</sup>	Endocrine negative feedback loop that prevents ovulation. <sup>26,30</sup>	Ovral has a higher concentration of estrogen, which increases the risk of nausea and vomiting when compared to other COCs. Contraindicated in women who have severe liver disease, a history thromboembolic events and sensitivity to ethinylestradiol. <sup>33</sup> Requires a prescription when used as a Yuzpe.
Combined oral contraceptive (COC)-Yuzpe Method	Ethinylestradiol+ Levonorgestrel	E.g. Nordette®	Initially take 2-4 tablets and repeat 12 hours later. <sup>28</sup>	Endocrine negative feedback loop that prevents ovulation. <sup>24,26</sup>	Better tolerated than Ovral as it has less ethinylestradiol. Can cause mild nausea, breast tenderness and headaches. Contraindicated in patients with a history of venous thrombosis. <sup>33</sup> Requires a prescription when used as a Yuzpe.

Table 1: Continued						
Therapy type	International non-proprietary name	Trade Name(s)	Dosage	Mechanism of action	Considerations	
Combined oral contraceptives (COC)-Yuzpe Method	Ethinylestradiol+ Levonorgestrel	E.g. Triphasil®	Initially take 4 tablets and repeat 12 hours later. <sup>26</sup>	Endocrine negative feedback loop that prevents ovulation. <sup>26</sup>	Same contradictions as other COCs. Contradicted in patients with a history of venous thrombosis. <sup>33</sup> Requires a prescription when used as a Yuzpe	
Progestrone-only oral contraceptive (POP)	Levonorgestrel	E.g. Zelleta®, Cerazette®	1 tablet taken daily at the same time each day with no break.	Desogestrel is more reliable than older progestin-only pills as it suppresses the surge in ovulation. It also thickens the cervical mucus and alters the endometrial lining. <sup>35</sup>	Recommended for women who cannot take estrogen. <sup>36</sup> Roughly 20% of women experiences unscheduled vaginal bleeding. <sup>35</sup> Strict timing required: 12-hour window. <sup>36</sup> Requires a prescription.	
	Levonorgestrel	E.g. Microlut®	1 tablet taken daily at the same time each day with no break.	Norethisterone is an older form of synthetic progestogen used in POPs. It primarily works by thickening the cervical mucus to inhibit sperm penetration; however, it can also inconsistently suppress ovulation. <sup>36</sup>	Recommended for women who cannot take estrogen. <sup>36</sup> Roughly 20% of women experiences unscheduled vaginal bleeding. <sup>35</sup> Strict timing required: 3-hour window. <sup>36</sup> Requires a prescription.	

pharmacist roles in contraceptive management, examine challenges and complications, and outline recommendations for a stronger pharmacist contribution within a collaborative, multidisciplinary framework.

### Role of pharmacists in contraceptive management

In South Africa, pharmacists support contraceptive management through both dispensing and counselling, particularly for ECs, which are widely accessible without a prescription in community pharmacies. Studies in Durban revealed that nearly all pharmacists had received EC requests in the past year, averaging 177 per pharmacist and a majority (62%) were already supplying EC without prescriptions.<sup>15</sup> Similarly, research in Soweto and Johannesburg’s CBD demonstrated pharmacists’ willingness to dispense EC. Although repeated use of emergency contraceptives is not associated with adverse health effects, many pharmacists remain hesitant to provide EC to adolescents under 18 due to perceived risks.<sup>9,10</sup> Regulatory frameworks stipulate that only pharmacists with supplementary registered training in family planning may provide reproductive health services.<sup>10</sup> However, ECs may be supplied without additional certification.<sup>16</sup> Mandatory service standards include ensuring patient privacy, thorough counselling, accurate documentation, and annual referral to a clinic for those initiated on contraception in pharmacies.<sup>11</sup> Beyond dispensing, pharmacists’ express readiness to adopt more patient-centred roles within primary health care (PHC) in line with South Africa’s shift toward universal health coverage (UHC).<sup>17,18</sup> A national survey found that around 75% of pharmacists believe that, with training, they could significantly contribute to PHC re-engineering, but success would require standardised reimbursement models and policy support.<sup>17,18</sup>

Some medical professionals have expressed concerns regarding the adequacy of pharmacists’ clinical training, the limited availability of examination and diagnostic infrastructure, and their ability to navigate the complexities of oral contraceptive decision-making in the absence of a comprehensive patient medical history.<sup>19</sup> These limitations may place pharmacists in ethically challenging situations, where dispensing decisions must be made with limited patient information.<sup>20,21</sup> Nonetheless, pharmacists authorised under the Section 22A (15) permits are equipped to initiate oral contraceptive, provided that they conduct structured patient interviews, offer counselling in a private area, and support informed choice in line with the rights-based, patient-centred principles emphasised by the National Contraception Clinical Guidelines.<sup>22,23</sup> Conducting thorough consultations helps reduce discontinuation and enhance long-term patient satisfaction while reinforcing collaborative care with other healthcare providers.<sup>23</sup>

### Complications associated with contraceptive use

Table I summarises commonly used COCs, POPs and ECs. Contraceptives can provide numerous benefits such as reducing unplanned pregnancies, improving reproductive health, and supporting family planning.<sup>25,36</sup> However, contraceptives such

as COCs contain both progestogen and oestrogen which can increase the risk of VTE.<sup>33,37</sup> This risk alone makes contraceptive pill selection and counselling essential. POPs are the safer alternative for women who cannot take oestrogen, but it can also cause inconsistencies and suppress ovulation.<sup>27,36</sup> The use of ECs may occasionally cause mild short-term changes in menstrual timing or flow, although current evidence does not indicate any long-term changes to the menstrual cycle.<sup>38</sup> These complications highlight the importance of personalised contraceptive counselling, where pharmacists and healthcare providers assess medical history, lifestyle, and individual risk factors to ensure both safety and effectiveness.

Other common side-effects include but are not limited to nausea, breast tenderness, headaches, mood changes, and weight fluctuations, which are generally mild and often resolve with continued use.<sup>26</sup> While these side-effects are typically not harmful, they may influence adherence and patient satisfaction.<sup>30,38</sup> Some women may also experience breakthrough bleeding or spotting, particularly during the first few months of new contraceptive use.<sup>30,36</sup> Emergency contraceptive pills, such as levonorgestrel and ulipristal acetate, can cause temporary side-effects like nausea, abdominal pain and, fatigue.<sup>24</sup> Proper counselling and reassurance are therefore essential to help women distinguish

between expected side-effects and complications requiring medical attention.

### Collaborative care approach

The Medicines and Related Substances Act 101 of 1965, as well as the Board Notice 314 of 2022, provide the legal framework that permits pharmacists in South Africa to deliver family planning services under section 22A (15).<sup>31,39</sup> This scope of practice is reinforced by the GPP standards, issued by the South African Pharmacy Council (SAPC), which require pharmacists to provide appropriate counselling and ensure confidentiality when dispensing contraceptives. For those authorised to prescribe under a Section 22A (15) permit, these standards also extend to conducting comprehensive patient assessments and maintaining patient records.<sup>34,36</sup> These guidelines emphasise that no oral contraceptive therapy should be initiated without a patient consultation, underscoring the importance of collaborative care where pharmacists work alongside doctors to strengthen contraceptive counselling and reinforce informed choice.<sup>36,40</sup>

While doctors provide essential contraceptive care, limited consultation time in some settings can make comprehensive counselling challenging, emphasising the collaborative role of pharmacists in patient care.<sup>18</sup> As such, pharmacists play

**Table II:** Practice-based recommendations for pharmacists in oral contraceptive provision

Recommendation	Substantiation	Rationale
<i>Provide private and confidential counselling spaces</i>	The Good Pharmacy Practice (GPP) standards of the South African Pharmacy Council (SAPC) require pharmacists to uphold confidentiality and dignity when counselling on sensitive health issues, including contraception. <sup>22,23,25</sup>	Counselling on reproductive health should be conducted in private areas, ensuring confidentiality and patient comfort, as it is standard for other sensitive medications.
<i>Conduct structured patient interviews before dispensing</i>	According to Board Notice 314 of 2022, pharmacists authorised to prescribe oral contraceptives under a Section 22A (15) permit must conduct an initial patient consultation before initiating therapy. <sup>31,39,41</sup>	Interviews should capture a comprehensive medical and social history, including risk factors such as smoking, history of venous thromboembolism (VTE), uncontrolled hypertension, and concurrent medication use that may alter contraceptive efficacy. This structured approach ensures appropriate patient selection and risk mitigation.
<i>Deliver clear and tailored contraceptive counselling</i>	Evidence shows that common side-effects (e.g. nausea, spotting, mood changes) often resolve with continued use, but reassurance and anticipatory counselling improve adherence and satisfaction. <sup>15,27</sup>	Pharmacists should provide patient-specific guidance on correct use of oral contraceptives, identification of active and placebo pills, management of missed doses, and recognition of side-effects that warrant medical review. Counselling should also emphasise that OCs do not protect against sexually transmitted infections (STIs).
<i>Promote informed choice through discussion of alternatives</i>	Informed choice reduces discontinuation and enhances long-term satisfaction. The National Contraception Clinical Guidelines emphasises rights-based, patient-centred care. <sup>23,36</sup>	Pharmacists are encouraged to present all available contraceptive options including injectables, implants, intrauterine devices (IUDs), and emergency contraception, so patients can make choices that align with their health profile, lifestyle, and fertility goals.
<i>Maintain accurate records and ensure continuity of care</i>	Pharmacists who prescribe oral contraceptives under a Section 22A (15) permit should ensure patients are referred annually to a clinic or doctor for clinical review, in line with the SAPC guidelines. <sup>23,34,39</sup>	Documentation of patient interviews, counselling, and dispensing history is critical for follow-up and continuity of care. Pharmacists should refer patients on OCs, to a clinic or doctor annually. This supports the referral pathway and strengthens collaboration with other healthcare providers.
<i>Engage in ongoing professional development and training</i>	The SAPC requires pharmacists to engage in a minimum of six continuing professional development (CPD) activities annually, adhering to a four-step process: Reflecting on practice, Planning, Implementing, and Evaluating. <sup>37,39</sup> Some CPD activities can be dedicated to contraceptive-based activity. <sup>39</sup>	Pharmacists are encouraged to seek additional education in reproductive health to comply with regulatory standards and stay updated with the latest advancements in contraceptive methods. This will enable them to provide accurate, evidence-based counselling and confidently address misconceptions.

a complementary role by bridging these gaps: providing additional counselling, clarifying misconceptions, and ensuring patients are supported with both oral and written reproductive health information.<sup>36,40</sup> This collaborative approach relies on pharmacists providing counselling within facilities equipped with private consultation areas to preserve patient dignity and confidentiality. However, pharmacists who seek to prescribe or initiate contraceptive therapy under a Section 22A (15) permit are required by the SAPC to complete supplementary training in reproductive health.<sup>18,39</sup>

## Recommendations

Pharmacists occupy a strategic position in primary health care and can play a guiding role in improving safety and efficacy of oral contraceptives (OCs). The following recommendations in Table II outline practical steps that can strengthen pharmacist-led interventions:

### Recommended pharmacist counselling guidelines for contraceptive provision

#### **Ensure privacy and confidentiality**

- Conduct counselling in a private or semi-private area.
- Reassure the patient that information shared will remain confidential.
- Maintain respectful and non-judgmental communication, particularly for adolescents or first-time users.

#### **For pharmacist-initiated oral contraceptives, conduct a structured patient interview before initiating therapy**

Use open and closed-ended questions to collect a comprehensive medical and social history. The following screening questions are suggested:

- Do you currently smoke? If yes, how many cigarettes per day?
- Do you have a personal or family history of blood clots (VTE), heart disease, blood clots in the lungs (pulmonary emboli) or stroke?
- Have you been diagnosed with high blood pressure, migraine with aura, or diabetes?
- Are you currently taking any medication (including herbal or over-the-counter products)?
- Are you pregnant, breastfeeding, or recently postpartum?
- When was your last menstrual period?
- Have you ever used contraceptives before? If yes, which type did you use, for what purpose and how was your experience?
- Do you have any known allergies or intolerances to medicines?
- Have you missed your period and when? (This should be asked to ascertain pregnancy according to the patient, prior to also requesting ECP, if the answer to question 7 is yes)

#### **Provide clear and tailored counselling**

Adapt counselling based on the type of contraceptive chosen. The following key discussion points may be used:

- How to use (identification of active and placebo pills, daily timing, pill breaks, importance of adherence).
- What to do if a dose is missed.
- Expected side-effects (e.g. mild nausea, spotting, mood changes, weight fluctuations) and when to seek medical attention.
- Emphasise that OCs do not protect against STIs, condoms are still recommended.
- For EC: explain timing (within 72–120 hours), one-time use.
- Discussions and advice on victims of assault. Refer for further management to an appropriate facility.

#### **Promote informed choice.**

Encourage patient autonomy when initiating contraception as a S22A (15) permit holder by discussing alternative options and ensuring understanding. The following guiding questions may be used:

- How do you feel about remembering to take a tablet at the same time each day?
- Are you looking for something that also regulates your menstrual cycle?
- Do you have preferences regarding hormones (oestrogen vs. progesterone-only)?
- Are you also looking for something that can aid with acne while you are on contraception?

#### **Emphasise safety and monitoring.**

- Discuss **red flag symptoms** (ACHES<sup>22</sup> mnemonic):
  - **A**bdominal pain (severe)
  - **C**hest pain or shortness of breath
  - **H**eadaches (severe, new onset)
  - **E**ye problems (vision changes)
  - **S**evere leg pain or swelling
- Advise on annual medical review (clinic or doctor) if initiated in pharmacy.
- Explain when to seek help if switching or discontinuing a method.

#### **Maintain documentation and continuity of care.**

- Record patient details, counselling provided, chosen method, and any referral.
- Pharmacists who prescribe oral contraceptives under a Section 22A (15) permit should ensure patients are referred annually to a clinic or doctor for clinical review, in line with the SAPC guidelines.
- Encourage patients to return for follow-up, especially after first 3–6 months.

#### **Commit to ongoing professional development**

- Stay updated on:
  - New contraceptive formulations.
  - The SAPC, WHO, and National Department of Health

guidelines as well as, Medical eligibility criteria (MEC) for contraceptive use, Selective Practice Recommendations (SPR) to ensure alignment with the best in reproductive health.

- Adverse effects, interactions, and emerging counselling best practices.

### Pharmacist counselling checklist (quick reference)

Area	Key Question/Task	Completed
Privacy maintained	Ensure counselling is conducted in a private area, as it is standard for all prescriptions.	<input type="checkbox"/>
History reviewed	VTE, smoking, hypertension, medications, pregnancy	<input type="checkbox"/>
Contraceptive type discussed	COC, POP, EC, or alternative method	<input type="checkbox"/>
Adherence explained	Identification of pills, dosing time and missed pill protocol	<input type="checkbox"/>
Side-effects explained	Common and serious (ACHES)	<input type="checkbox"/>
HIV and STI protection discussed	Refer for HIV testing, condom use emphasised	<input type="checkbox"/>
Documentation	Interview, counselling, referral recorded	<input type="checkbox"/>

### Concluding remarks

Oral contraceptives remain an important part of reproductive health, and their safe and effective use is dependent on more than just accessibility. Pharmacists, as some of the most accessible healthcare professionals within communities, are uniquely positioned to bridge gaps in patient understanding, promote treatment adherence, and identify risk factors at an early stage. By providing confidential counselling spaces, conducting structured interviews and giving comprehensive guidance, pharmacists can elevate contraceptive services from a transactional process into a patient-centred service. In doing so, they would not only safeguard patient safety and satisfaction but also contribute meaningfully to South Africa's broader goals of improved health outcomes.

### Conflict of interest

The authors have no conflict of interest to declare.

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