



Exploring community pharmacists' perceptions towards the prescribing role in Limpopo province, South Africa: A qualitative study

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Abstract

Objectives: This study aims to explore community pharmacists' perceptions of their evolving role in prescribing.

Methods: A qualitative, exploratory, and descriptive research design was utilized. Pharmacists working in community pharmacies in Polokwane, South Africa, were purposefully selected. With data saturation achieved, 14 pharmacists participated in the study. Data collection was carried out through semi-structured, face-to-face interviews, which were transcribed verbatim and analyzed using Tesch's open coding technique.

Results: The majority of participants expressed satisfaction with their new role as prescribers, emphasizing that they possess the necessary knowledge and pharmacology skills to diagnose patients and recommend appropriate treatments. Findings underscore a variety of benefits, including advantages for patients, financial benefits, and professional growth for pharmacists.

Conclusion: Pharmacists' involvement in prescribing has the potential to enhance rational prescribing practices, improve medication use, reduce medical costs for patients, expand pharmacists' therapeutic knowledge, and enhance access to healthcare services. Increasing pharmacists' prescribing capabilities and the availability of approved training institutions may foster greater interest in this field.

Keywords: Community pharmacist, Prescribing role, Pharmacists.

Introduction

The global scope of practice for pharmacists has expanded to meet the changing demands of patients and healthcare systems, leading to the inclusion of various prescribing responsibilities.^[1,2] Community pharmacists (CPs) are now recognized for their crucial role in providing practical and easily accessible assistance to patients with minor medical conditions.^[3] Community pharmacies often serve as the initial point of contact for individuals seeking medical help, making them well-suited to address primary healthcare (PHC) needs within local communities. Some of the PHC services offered by CPs include immunization, selected sexual and reproductive health services, and screening and monitoring of cholesterol and blood glucose.^[4]

Traditionally, only physicians and dentists had the authority to prescribe medications.^[5] However, recent changes in laws and regulations have empowered pharmacists to practice as authorized prescribers. The involvement of pharmacists in delivering comprehensive patient care packages has gained traction worldwide. Countries like Norway, the United Kingdom, Belgium, and France have enhanced their healthcare referral systems by recognizing pharmacists as essential points of care within the PHC setting.^[6-9] New Zealand has introduced pharmacists as prescribers, following collaborative prescribing practices from the United States and the United Kingdom.^[10-12] Similarly, pharmacists in various countries, including Portugal, the United Kingdom, Ireland, and the United States, play a vital role

in administering immunization programs.^[13,14] In Canada, pharmacists are authorized to provide integrated PHC approaches focusing on chronic medical conditions management and personalized patient care.^[15] Numerous systematic reviews support the safety and effectiveness of expanding pharmacists' roles to include prescribing responsibilities.^[11] However, some countries like Nigeria have not yet adopted pharmacists' prescribing roles, despite positive attitudes among pharmacists toward this function.^[16] In Zimbabwe, pharmacists are limited to dispensing medications based on a physician's prescription without the authority to diagnose, prescribe independently, modify drug dosages, renew prescriptions, administer injections, or order lab tests.^[17]

Studies have demonstrated favorable disease-specific outcomes when pharmacists are involved in treating conditions such as asthma, hypertension, heart failure, diabetes, anticoagulant therapy, and dyslipidemia.^[18-21] Nevertheless, concerns have been raised about potential risks associated with overlapping scopes of practice between pharmacists and physicians, which could lead to patient harm due to prescription modifications or miscommunication about drug monitoring.^[22] Overcoming obstacles related to knowledge, skills, education, professionalism, legality, and technology is essential before pharmacists can fully embrace prescribing responsibilities. The overlapping responsibilities between pharmacists and physicians may require time to establish, similar to the relationship between family practitioners and specialists.^[22] Additionally, the provision of prescribing duties by pharmacists has been hindered by a lack of knowledge or skills observed in countries like China, Sudan, Nepal, Japan, and Nigeria.^[23-25] Despite numerous research highlighting the benefits of the extended role of pharmacists in prescribing, Emmerton et al.,^[26] argue that various educational, professional, legal, and technological obstacles must be addressed before pharmacists can prescribe.

A systematic review of stakeholders' perspectives and experiences with pharmacist prescribing raised some concerns. In this review, physicians expressed concerns about pharmacists' lack of clinical examination and diagnosis abilities, their inability to access specific patients' medical records, potential harm to the physician-patient relationship, legal issues related to the division of clinical care obligations, and communication challenges among pharmacists, prescribers, and other members of the medical team.^[27] Nordin et al., argue that if community pharmacists handle communication with physicians in a disciplined and methodical manner without interfering

with their roles as physicians, the working relationship among healthcare practitioners may be improved.^[28]

In South Africa, pharmacists are required to obtain the Primary Care Drug Therapy (PCDT) qualification, enabling them to diagnose only primary healthcare (PHC) conditions and prescribe medication based on a specified list of conditions.^[29] PCDT pharmacists are also trained to refer patients to physicians for conditions outside the specified list or those that are complex and critical. While community pharmacists in South Africa treat minor illnesses, few studies have explored their perceptions and attitudes towards their extended prescribing role.

Objectives

This study aims to explore and describe community pharmacists' perceptions and attitudes towards their emerging role in prescribing within Polokwane community pharmacies in Limpopo province, South Africa.

Methods

The study utilized a descriptive qualitative approach to gather in-depth insights into community pharmacists' (CPs) perspectives on their evolving role as prescribers. Semi-structured, individual face-to-face interviews were carried out with CPs in Polokwane, Limpopo province, South Africa, between October and November 2022. The study population comprised all pharmacists registered with the South African Pharmacy Council (SAPC) working in community pharmacies in Polokwane. There are currently 21 pharmacies in the city, each employing approximately one pharmacist, totaling 21 participants. Participants were selected using purposive sampling based on their work experience and knowledge relevant to the study objectives. Pharmacists with at least one year of experience in the field, understanding of the work environment, and eligibility for the required prescriber course were included.

The sample size was calculated using Yamane's statistical formula,^[30] considering a population size of 21 and an acceptable sampling error of 5%, resulting in a sample size of 19 participants. Due to the proximity of the sample size to the target population, Total Population Sampling was employed to include all eligible participants.^[31] This approach allowed for a comprehensive exploration of the phenomenon. Data collection continued until data saturation was reached, where no new themes emerged, culminating in 14 in-depth interviews.^[32]

A semi-structured interview guide was developed

following an extensive literature review and author discussions to collect data. The guide comprised two sections: the first section gathered demographic details of CPs (gender, job position, qualifications, years of experience as a pharmacist, and years working in a community pharmacy), while the second section focused on pharmacists' perspectives on their prescribing role and included follow-up questions. Face-to-face individual interviews were conducted over three weeks with participants who consented to participate. Interviews were conducted at the participants' workplace in Polokwane pharmacies in a private setting. Participants were informed about the study's aim and voluntary participation. An interview guide with central and follow-up questions guided the conversations, and interviews were recorded with participant consent. Individual interviews were conducted to ensure unbiased responses from each participant.

Audio recordings were transcribed verbatim for thematic analysis using Tesch's open coding technique.^[33] Analysis was independently conducted by the researchers, with disagreements resolved through discussion. Regular meetings among authors were held to ensure consensus on

themes and subthemes. Trustworthiness, transferability, credibility, dependability, and conformability were considered to enhance the study's rigor.

Ethical Considerations

The study adhered to the principles outlined in the Declaration of Helsinki. Approval from the Turfloop Research and Ethics Committee (code: TREC/505/2022:UG) was obtained. Written informed consent was obtained from pharmacists before their participation in the study.

Results

Fourteen pharmacists were interviewed, with nine (64.29%) being females and five (35.71%) males. Among the participants, twelve (85.71%) held a B Pharm degree, one (7.14%) had an M Pharm degree (Master of Pharmacy), and one (7.14%) had a PCDT qualification. The majority of participants had over five years of work experience, with seven identified as Responsible pharmacists and the remaining seven as supporting pharmacists. The analysis of interview transcripts revealed three themes and six sub-themes, detailed in Table 1.

Table 1. Themes and sub-themes

Themes	Sub-themes
Theme 1: Attitude of community pharmacists towards practicing as authorised prescribers	<ul style="list-style-type: none"> • Willingness of pharmacists to practice as authorized prescribers
Theme 2: Benefits of extending the role of pharmacists to prescribing.	<ul style="list-style-type: none"> • Benefits to pharmacists • Benefits to pharmacies • Benefits to patients
Theme 3: Strategies for strengthening prescribing role of pharmacists	<ul style="list-style-type: none"> • Introduction of more approved training institutions • Promotion of Primary Care Drug Therapy by the South African Pharmacy Council

The sub-theme "Willingness of pharmacists to practice as authorized prescribers" emerged concerning community pharmacists' attitudes towards this role. Participants expressed varying views on practicing as authorized prescribers, with some reporting satisfaction and viewing it positively due to their knowledge and skills, albeit limited by their qualifications. One participant stated, "It's a good thing for pharmacists to have a role in prescribing, as we are the custodians of medicine." (Participant 6)

While many participants showed interest, others expressed a lack of interest in prescribing, citing discomfort with tasks such as physical examinations and medication administration. One participant mentioned, "Personally no. I am not about touching patients." (Participant 8)

Pharmacy staff benefits, patients' benefits, and financial benefits were identified as three categories of benefits associated with pharmacists' prescribing roles. Participants highlighted the advantages of having pharmacists as prescribers, including increased income, professional growth, and enhanced reputation within the profession: "It means more money for us. Secondly respect. We need respect more than anything." (Participant 3) "Professionally, it's really equipping. It means more knowledge and more expertise." (Participant 4) "I think it will also change the perception that some people in the community have with regards to pharmacists." (Participant 5)

Several participants expressed that pharmacists prescribing will promote the rational use of medications,

save time for patients, offer easy access, and provide cost-effective healthcare services. Participants emphasized that pharmacists, as custodians of medicine, have more knowledge about medication use, which can lead to the promotion of rational medicine use and a reduction in prescribing errors.

One participant stated, "It will be convenient for the patient since they would get medical care at a minimum cost. Obviously, if you go to the doctor, you are paying a lot of money. Pharmacies keep a wide range of medicines far more than doctors and clinics, so they have a backup of choice." (Participant 7)

Another participant mentioned, "The benefit of pharmacist prescribing is that it promotes rational use of medicines. So, pharmacists being the custodian of medicines and knowing how to use these medicines will go a long way in helping with rational use of medicines." (Participant 2)

Participants also believed that the new role would increase the number of customers in the pharmacy, leading to enhanced profits. One participant explained, "If pharmacists prescribe, the pharmacy will be a one-stop-shop. If we offer what patients need here, I think we would benefit profit-wise. It may not be a significant profit on medications, but capturing the percentage of patients we lose because the item needed a prescription would be good to grab." (Participant 14)

Regarding the advantages of pharmacist prescribing, participants believed that patient benefits were the main advantage among the three categories mentioned in this theme. They recognized the opportunity for expanded duties to apply their expertise and improve patient care. Other benefits such as increased status, responsibility, clearer career paths, job satisfaction for pharmacy employees, utilization of pharmacy skill mix, and financial advantages of pharmacist involvement in medication management were also emphasized.

Based on their community-level experiences, participants proposed various strategies to enhance pharmacist prescribing after identifying barriers to implementation or role development. These strategies included introducing more approved institutions, promoting pharmacist prescribing by the South African Pharmacy Council (SAPC), and ensuring accessibility of the course to all graduates. Participants recommended increasing training institutions in South Africa to encourage participation and make the course more accessible to a larger number of pharmacists interested in undertaking it.

Some participants expressed disappointment with the

SAPC's involvement in implementing pharmacist prescribing. They suggested that the council should play a more active role in ensuring full implementation of the role. One participant recommended that the council should set clear guidelines and indicators to differentiate pharmacies with pharmacist prescribers from regular pharmacies to inform the public where to seek such services.

To facilitate its development and streamline its implementation, it was suggested that policies and legislation should be established to govern pharmacist prescribing. Participant 9 emphasized the need for the South African Pharmacy Council (SAPC) to develop policies and legislation governing this new branch of pharmacy, including government gazettes, regulations, and involvement from the South African Health Products Regulatory Authority (SAHPRA).

The strategies mentioned above were identified as key takeaways from the experiences of community pharmacists. The introduction of more training facilities was deemed essential for driving change. Additionally, it was highlighted how important it is to engage key stakeholders at all levels of government to advocate for changes in pharmacy practice.

Discussion

This study delves into the perspectives of pharmacists regarding their evolving role in prescribing within Polokwane's community pharmacies in Limpopo province. The discussion primarily describes pharmacists' views on the emerging prescribing role in comparison to existing literature. The findings reveal that pharmacists are prepared to take on expanded professional responsibilities, with the majority believing that their involvement in diagnosis and prescribing will enhance job satisfaction and productivity. The general attitude of community pharmacists in Polokwane towards the prescribing role is seen as a positive initiative. These results align with a study in Nigeria, which showed pharmacists' interest in expanded clinical activities, including prescribing, and their willingness to engage in independent prescribing.^[27] Similarly, research in Saudi Arabia indicated that most community pharmacists were open to prescribing oral contraceptives to improve patient access.^[34]

Empowering pharmacists to leverage their skills through prescribing not only boosts job satisfaction and employee engagement but also enhances efficiency, ultimately benefiting patient care outcomes. The study underscores that most pharmacists are content with the Pharmaceutical Care and Drug Therapy (PCDT) course,

viewing it as a positive step towards authorizing pharmacists to treat patients based on their resources, knowledge, and skills. Previous research supports this by indicating that with additional training, pharmacists are ready for independent prescribing.^[10] A study in Zimbabwe echoes these sentiments, emphasizing the importance of acquiring knowledge and skills for pharmacists to effectively engage in prescribing.^[17]

However, some participants expressed dissatisfaction with the PCDT qualification, citing poor implementation and limited information availability about the course. Participants highlighted the benefits of pharmacists as prescribers, including improved public perception, increased respect from the community, and enhanced income from this new role. They also stressed the importance of expanding knowledge and professional development.

Many participants noted that pharmacist prescribing would save time for patients, provide convenient access to healthcare services, and offer cost-effective solutions. These findings are consistent with previous research highlighting various advantages associated with pharmacist prescribing, such as increased professionalism, enhanced patient outcomes through improved drug therapy continuity, and reduced adverse reactions to medications.^[35]

Pharmacists, as guardians of medicine, possess extensive knowledge about medication use, making pharmacist prescribing a key factor in promoting rational medication utilization and reducing prescribing errors. This aligns with a study emphasizing the importance of harnessing pharmacists' potential to enhance patient safety through prudent medication management. To achieve this, it is crucial to provide pharmacists with comprehensive training to reinforce their existing competencies and equip them with the necessary knowledge and tools.^[37]

Pharmacists bring a unique perspective to patient consultations due to their pharmacological expertise and understanding of medications. They are well-positioned to assist patients in optimizing their medication regimens and involving them in treatment decisions, thereby improving patient adherence to medications.^[38] Research supports this by demonstrating that pharmacists make fewer errors than doctors in prescribing practices, underscoring the potential for increased patient safety through expanding the number of independent pharmacists authorized to prescribe.^[39]

Furthermore, having Community Pharmacists (CPs) as prescribers can enable patients to access regular check-ups at lower costs by visiting their nearest pharmacy.

Participants in the study highlighted that pharmacists' superior communication skills with patients would result in better care delivery. They also noted that pharmacist prescribing could attract more customers to pharmacies, thereby enhancing profitability.

Studies have shown that pharmacists excel as prescribers in managing both acute and chronic illnesses, leading to positive outcomes such as improvements in blood pressure, glycated hemoglobin levels, and lipid profiles.^[39,40] To facilitate the participation of more pharmacists in prescribing roles, there is a need for additional training institutions in South Africa to promote enrollment in courses like Pharmaceutical Care and Drug Therapy (PCDT). Higher education institutions should integrate PCDT courses into their curricula to enable pharmacists to specialize in personalized care options and gain exposure to clinical procedures.

Efforts to expand the pharmacist's role require collaboration among stakeholders. Statutory bodies such as the South African Pharmacy Council and Health Professional Council of South Africa must collaborate to develop policies, regulations, and legislation related to pharmacists' prescribing roles. Additionally, raising awareness among other professionals and communities is essential. Policymakers should consider the qualifications and educational background necessary for pharmacists to provide PCDT services, recognizing it as a cost-effective essential service within insurance systems like the National Health Insurance.^[40] Empowering pharmacists in prescribing roles can significantly enhance patient care, improve medication management, and contribute to better health outcomes. Collaboration among stakeholders and policymakers is crucial to support the expansion of pharmacists' scope of practice in prescribing.^[4]

Conclusions

The general views of community pharmacists in Polokwane were positive towards the pharmacist's role in prescribing. While the pharmacist prescriber role was seen as a positive development for the profession, the study findings underscored the importance of promoting awareness of pharmacist prescribing courses, understanding the course content, and recognizing the pharmacist's scope of practice in prescribing by stakeholders and employers. The expansion of pharmacists' roles in prescribing is expected to enhance rational prescribing practices, reduce medical costs for patients, enhance pharmacists' therapeutic knowledge, and improve access to healthcare services. Increasing pharmacists' prescribing capacity and the availability of

approved training institutions may generate more interest in pursuing the prescribing role and related courses.

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Competing interests

The authors declare that they have no competing interests.

Abbreviations

CP: Community pharmacist;

PCDT: Primary Care Drug Therapy;

SAHPRA: South African Health Product Regulatory Authority;

SAPC: South African Pharmacy Council.

Authors' contributions

Concept – N.M., T.C.; Design – N.M., T.C.; Supervision – N.M., T.C; Resources – M.R., U.R., K.M., D.M; Materials – M.R., U.R., K.M., D.M; Data Collection and/or Processing – M.R., U.R., K.M., D.M; Analysis and/or Interpretation – T.C., N.M., M.R., U.R., K.M., D.M; Literature Search – T.C., M.R., U.R., K.M., D.M; Writing – T.C.; Critical Reviews – N.M., T.C. All authors read and approved the final manuscript. All authors take responsibility for the integrity of the data and the accuracy of the data analysis.

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Availability of data and materials

The data used in this study are available from the corresponding author on request.

Ethics approval and consent to participate

The study was conducted in accordance with the Declaration of Helsinki. The Turfloop Research and Ethics Committee approval (code: TREC/505/2022:UG) was obtained. Written consent to participate were obtained from pharmacists before conducting the study.

Consent for publication

By submitting this document, the authors declare their consent for the final accepted version of the manuscript to be considered for publication.

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