

Original Article

Barriers to Community Pharmacists' Prescribing Role in Limpopo Province, South Africa: A Qualitative Study

Noko Brilliant Moloto¹, Tiisetso Aubrey Chuene^{2*}, Kgaugelo Daphney Makgopa¹, Koketso Malekhwekhwe Mogano¹, Mmakgwedi Unika Rakgoale¹, Manase Sarender Rekhotho¹

¹Department of Pharmacy, Faculty of Health Sciences, University of Limpopo, Sovenga, Polokwane-0727, South Africa

²Department of Student Affairs, Student Health and Wellness Centre, University of Limpopo, Sovenga, Polokwane-0727, South Africa

***Corresponding author:** Tiisetso Aubrey Chuene. Department of Student Affairs, Student Health and Wellness Centre, University of Limpopo, Sovenga, Polokwane-0727, South Africa. Email: tiisetso.chuene@ul.ac.za .ORCID: <https://orcid.org/0000-0003-1976-146x>

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Abstract

Background

The healthcare system had rapidly advanced with greater focus on improving the quality of healthcare and safety of patients. Parallel with the transforming healthcare systems, new policies have emerged to allow pharmacists to prescribe. Little is known about the barriers to community pharmacists' prescribing role in Limpopo province.

Purpose

The purpose of this study was to explore the barriers to community pharmacists' prescribing role in Limpopo province and give recommendations to enhance pharmacists' prescribing role at community pharmacies.

Methodology

This was a qualitative study in which community pharmacists in Polokwane were interviewed. Due to data saturation, 14 pharmacists participated. Data collection was through semi-structured face-to-face interviews. The interviews were audio-recorded, transcribed verbatim and analysed using Tesch's open coding method.

Results

Most participants reported their readiness to prescribe and viewed it as a positive initiative. Results revealed barriers associated with the prescribing role such as lack of knowledge and awareness of the supplementary program, lack of dedicated time for prescribing, lack of recognition from employer, lack of support from medical doctors, and limited scope of practice.

Conclusion

Pharmacists' prescribing role is a great initiative that will strengthen the healthcare system however the identified barriers need to be addressed to ensure that pharmacists offer safe and effective patient-centred healthcare. A coordinated effort is therefore necessary for the formulation of clear policy frameworks, including more training facilities, increasing stakeholder awareness to support pharmacist prescribing role, and identifying financial, infrastructure, and other resource demands to support the smooth integration of pharmacist prescribing.

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Introduction

Pharmacists have been integrated into the healthcare systems, such as community pharmacies, hospitals, and primary healthcare clinics.[1-3] Community pharmacists are among the most conveniently accessible healthcare professionals and are the public's first point of reference for pharmaceutical advice.[3] The primary role of pharmacists includes the management of pharmaceuticals, preparation and dispensing of medications, giving advice on the rational use of medications, and developing pharmaceutical care plans for patients.[4] Pharmacists play a vital role in improving clinical outcomes and advancing healthcare through close collaboration with other healthcare professionals.[3] Given the increasing strain on the availability of medical doctors, policy makers in some countries have started to explore the possibility of involving pharmacists to prescribe medications for certain conditions.[5-7]

Globally, pharmacist involvement in prescribing had increased in prevalence. In countries such as New Zealand, the United States, and United Kingdom, collaborative prescribing practices had been introduced with pharmacists having been incorporated as prescribers.[8, 9] In Canada, the role of pharmacists had been moved to providing a more cooperative primary healthcare that was centralised on direct patient care and the management of chronic conditions.[10] In countries like Nigeria, only dentists and physicians had the authority to prescribe medicines, but a qualitative study showed pharmacists' readiness towards the expansion of their roles in prescribing.[11]

In South Africa, pharmacist prescribing role was introduced in 2011, and pharmacists are expected to complete the Primary Care Drug Therapy (PCDT) qualification to obtain a permit for prescribing.[12] This qualification, which is a postgraduate diploma in Pharmacy, was introduced by the South African Pharmacy Council (SAPC)

to prepare pharmacists to diagnose and treat patients using the medicines specified in the Primary Health Care (PHC) Standard Treatment Guideline (STG) and Essential Medicines List (EML) guidelines.[12] However, despite the introduction of this new policy, not many registered pharmacists in South Africa, have pursued the PCDT course. In 2021, for instance, of a total of 17 181 pharmacists, only 363, 2.1% of registered pharmacists by July 2021 had registered for PCDT supplementary training with the SAPC.[13] The overall target of the policy was to train all pharmacists in the country in line with the PHC STG & EML guidelines.[14]

Little is known about the barriers to pharmacists' prescribing role in South Africa. Identifying the possible barriers that can impede pharmacists from operating as prescribers is required in order to address them and permit appropriate large-scale implementation. At present, there are no previous studies conducted to investigate the barriers to community pharmacists' prescribing role in Limpopo province. This study therefore aims to explore the barriers to community pharmacists' prescribing role in Limpopo province and give recommendations to the identified barriers.

Methodology

Study setting and design

The study was conducted in community pharmacies in the city of Polokwane, in Limpopo province of South Africa. There are about 21 community pharmacies scattered around Polokwane. For better comprehending the study's goals and determining the need for additional interventions, a qualitative approach was used. The study employed a descriptive qualitative approach, which was exploratory in nature. The researchers completed the descriptive portion of the design by allowing participants to explain the problem under investigation depending on the question posed.

Population and sample

The population of this study comprised all pharmacists registered with the SAPC working in community pharmacies in the city of Polokwane. There are currently 21 pharmacies in Polokwane city with each pharmacy employing about 1 pharmacist, which amounts to 21 pharmacists. The researchers used a purposive sampling method to choose participants based on their work experience and knowledge as they were known to possess information required to answer the objectives of the study. Pharmacists who had at least one year of work experience were purposively sampled based on the fact that they understood the work environment, had sufficient knowledge required for the study, and were eligible to undertake the course required for pharmacists to become prescribers. The sample size was determined using the concept of data saturation.[15] The data collection was therefore ended after 14 in-depth interviews because no additional themes could be found.

Data collection

A semi-structured interview guide used for gathering data was developed through review of previous literature and discussion among the authors. An interview guide with central question and possible follow-up questions was used to begin and guide the conversations. The entire ranges of questions were open-ended; this allowed for greater possibility for perspective articulation and a deeper comprehension of the relevant subjects. Pilot interviews were conducted in Mankweng pharmacies to assess whether the generated sets of questions were helpful in the objective information retrieval and no modifications were made to the questionnaire.[16]

Semi-structured, face-to-face interviews were conducted with pharmacists in Polokwane to get their views on becoming prescribers. An email was sent to each community pharmacy in Polokwane to arrange interviews. Interviews were conducted over a period of three weeks with those who agreed.

Participants were approached to arrange for a restricted area at their workplace where the interviews would be conducted. Participants were given information on the aim and purpose of the study and were informed that participation in the study was voluntary. An interview guide with central question and possible follow-up questions was used to begin and guide the conversation, and the interview was recorded with permission from the interviewees. Probing questions were aligned with research questions. Some examples of probing questions are as follows: the emerging role of prescribing by pharmacist; barriers the participant thought would arise from having pharmacist as prescribers; how the identified barriers could be addressed, and the views that PCDT Pharmacist will not be diagnosing and treating all the conditions as per PHC STG & EML guidelines.

The researchers interviewed participants individually to obtain the personal and intimate views of each participant without the influence of others. Interviews were conducted in English and lasted approximately 45-60 minutes each. Additional information like participants' demographics was also collected before the interviews.

Data analysis

For data analysis, the audio recordings were transcribed verbatim and prepared for thematic analysis. Tesch's open coding technique for thematic analysis as explained by Creswell,[17] was employed through the following steps: Organising and preparing the data for analysis, reading through all the data to gain a general idea of what it contains and possibly its broader meaning, organising the data into chunks of information and writing a word that represents a category in the margin, giving detailed descriptions of the context and the participants involved as well as descriptions of the categories or themes for analysis, presenting the results in a narrative format to convey the findings of the analysis,

and interpreting the results of the analysis. [17] To achieve unanimity, the authors met often to discuss and compare various perspectives on each theme and subtheme. [18]

Strategies to enhance rigor

To determine the degree of trustworthiness, credibility, transferability, dependability, and confirmability were employed.[19] To establish credibility in this study, a semi-structured interview guide was used during data collection and researchers asked for clarifications to confirm that they understood what the participants shared and to ensure that the data gathered accurately reflected the perspectives of the participants and was reliable. To ensure the confirmability of the data, all authors were involved in the study's design, analysis, and team discussions to promote agreement with the findings of the study. Additionally, transcripts, findings, and interpretations are also retained to allow other researchers to perform an audit trail. To ensure the dependability of the data, community pharmacists were purposively sampled to understand the barriers to prescribing in Limpopo province through face-to-face individual interviews until data saturation was achieved. Transferability of data was established by providing comprehensive description of the study design, setting, participants characteristics, data collection and analysis process and results.

Ethics approval

The ethical approval for this study was obtained from the Turfloop Research and Ethics Committee (REF. TREC/505/2022: UG). The study's objective and methodology were explained to the participants. All participants gave their consent to be interviewed and recorded, and participation was made voluntarily. The option to withdraw consent to the study at any point and without reasons was made clear to participants. By keeping the information private and using participant codes to conceal the identities of the participants, confidentiality and anonymity were guaranteed.

For instance, the participants were given the codes "P1", "P2", "P3", etc.

Results

Demographic characteristics of participants

Altogether, fourteen pharmacists were interviewed. Nine (64.29%) were females and five (35.71%) were males. Out of the 14 participants interviewed, twelve (85.71%) had B Pharm degree qualification, one (7.14%) had M Pharm degree (Master of Pharmacy), and one (7.14%) had PCDT qualification. Nine (64.29%) of the participants had a working experience of over five years. Seven (50%) of the participants were registered as responsible pharmacists of the community pharmacies in terms of Sections 22(4), 22(5) and 35A of the Pharmacy Act, 53 of 1974, while the remaining seven (50%) were working as supporting pharmacists.

Themes and subthemes

From data analysis, three themes emerged and were grouped into seven sub-themes. Table 1 shows the results of thematic analysis.

Table 1. Themes and subthemes emerged from data analysis

Themes	Subthemes
Views of community pharmacists towards prescribing role.	(i) Pharmacists’ readiness to practice as prescribers.
Barriers to pharmacists prescribing.	<p>Pharmacy barriers:</p> <p>(i) Lack of knowledge and awareness on PCDT program.</p> <p>(ii) Pharmacists’ lack of clinical knowledge.</p> <p>Organisational barriers:</p> <p>(iii) Lack of dedicated time for prescribing.</p> <p>(iv) Inadequate infrastructure to provide prescribing services.</p> <p>(v) Lack of recognition from employer in terms of remuneration and posts.</p> <p>(vi) Lack of support from medical doctors.</p> <p>Legislative barriers</p> <p>(vii) Limited scope of practice by prescribing pharmacists.</p>
Suggestions to address the identified barriers.	<p>(i) Additional PCDT training institutions to promote enrolment.</p> <p>(ii) Hiring of PCDT pharmacists in community pharmacies.</p> <p>(iii) Strengthening collaboration amongst stakeholders.</p> <p>(iv) Reduce limitations on the diagnosis and treatment of minor conditions.</p>

Theme 1: Views of community pharmacists towards prescribing role.

Sub-theme: Pharmacists’ readiness to practice as prescribers.

Participants demonstrated different views on the readiness to practice as prescribers. Majority of the participants reported their readiness to prescribe and viewed it as a positive initiative as they possess the knowledge and pharmacotherapy skills but were limited due to their qualification which did not encompass prescribing. One of the participants said:

“It is a good initiative for allowing pharmacists to prescribe because pharmacists have an intense knowledge when coming to pharmacology. Additionally, training us to

be prescribers will reduce the workload of doctors and this will also be beneficial to patients as they will have options to consult a doctor or pharmacists. So, I am therefore willing to enrol.” (P10).

The issue of readiness was also stated by another participant who highlighted that in addition to existing pharmacist-initiated therapy, pharmacists can manage minor conditions:

“We do have knowledge about pharmacology, so we are in a good position to prescribe for minor conditions like we do during pharmacist-initiated therapy. So, granting us permission to prescribe can improve patient care through safe use of medicines and access to treatment”. (P5)

Even though majority of participants showed interest, other participants shared that they genuinely have no interest in prescribing. In showing lack of readiness on prescribing role, one of the participants indicated that they are certified with the limitations that come with the current scope of practice of a pharmacist:

“I don’t think I am ready to prescribe anything above schedule 2 because it will mean I have to go back to training again. So, I wouldn’t mind working in a big busy pharmacy than to be a Primary Care Drug Therapy pharmacist”. (P2)

Prescribing role involves the physical examination of the patient which some of the participants indicated that they are not ready to perform such. One of the participants said:

“Personally, I am not about touching patients. No! That is why I did not want to be a doctor or a professional nurse. So, I am fine with the current scope of practice and I am not willing to be involved in prescribing”. (P8)

Theme 2: Barriers to pharmacists prescribing.

Subtheme 1: Lack of knowledge and awareness on the PCDT program

Lack of awareness of the program was found to be one of the barriers to the emerging role of prescribing pharmacist. Some participants claimed to be completely unaware of the PCDT program, which is the current training program required to become a prescribing pharmacist in South Africa. On the other hand, some of the participants indicated that they were aware of it but never investigated further to learn more about it:

“I don’t really have knowledge of that thing, I heard about it in passing but then sitting down and looking at it, I’ve never went in depth of that thing. The only thing I know in depth is the PMART” (P2)

“I don’t have any knowledge in it. I know the course, but I don’t know much information about the course. What I know is that it’s a course that you can do online. I’ve seen someone do it online and it involves lot of practice.” (P12)

Subtheme 2: Pharmacist’s lack of clinical knowledge

Pharmacists indicated that their lack of adequate clinical expertise would make diagnosis difficult because they were less knowledgeable concerning anatomy and physiology or clinical topics than doctors due to their undergraduate training. They indicated that even if they enrolled in the PCDT course to become prescribers, they would not be able to match with doctors who had undergone six years of training in order to evaluate the patient because they had not undergone the same training during their four years in pharmacy school. They indicated that rather than other aspects, they mostly focused on drugs during their study so they feel they will not be as competent even after completing the course:

“But another thing is, doctors have been trained for 6 years and we have been trained for 4 years... We are not trained to do physical assessment on a patient, that is where we lack and if a patient is coming in, they won’t get that. Even though we go for training, with the prescribing course but I don’t really know if we really going to match with the doctors in terms of physical assessment, and if we won’t be competent in physically assessing the patient then it’s a disappointment to them” (P4)

“We didn’t do much of anatomy and diagnosing. For me, I think it is a start. Let’s just start somewhere... its fine things can improve” (P6)

Subtheme 3: Lack of dedicated time for prescribing

Most pharmacists indicated that they are managers or responsible pharmacists, which meant they had a lot of responsibilities. They believed they would not have the time to perform both roles as a pharmacist and as a prescriber, that it would be very challenging, and that they would still need additional assistance, possibly from the prescribing nurse:

“Practically it is not easy for a pharmacist to do the course, practice it and at the same time be a pharmacist. Even those who did the course, you may find that they still employ a nurse in their pharmacy and the nurse would do diagnosis and prescribing”. (P7)

“There are a lot of duties one has to do already and adding another role will be too much work, it will be a lot of burden to focus on dispensing and prescribing.” (P11)

In addition, one pharmacist highlighted that they would be required to work overtime or additional hours, which would be demanding for them. Moreover, the other participants raised the possibility that having several responsibilities or a heavier workload while carrying out a pharmacist's primary responsibility and the extra duty of prescribing could result in diagnosing errors that could endanger the patient.

“The challenge is that there will be a lot of work for pharmacists, because you will be playing two roles of being a pharmacist and a doctor. It will be a burden to pharmacists because they will make them work overtime.” (P10)

Subtheme 4: Inadequate infrastructure to provide prescribing services.

One of the obstacles to prescribing by pharmacists is the necessity to upgrade facilities to handle the patients who would be coming for consultations. It was reported that it will also be necessary to set up things like special equipment, space for diagnostic tools, devices, and consultation rooms.

“The challenge of having pharmacists as prescribers, besides having to cost them, is the issue of space. I mean that you cannot practice over the counter like they used to, so they will need devices and equipment obviously for tests and diagnostics. I think other than that, patients will benefit but it will need space.” (14)

Subtheme 5: Lack of recognition from employer in terms of remuneration and posts

Pharmacists reported that some of the private companies would not see the need to add more pharmacists to alleviate the workload. They have not seen posts for pharmacists who had obtained the PCDT degree or specifying that a pharmacist with such special skills or having the PCDT was required.

It was also stated that after completing the degree, they would be paid the same as other pharmacists who had not completed the degree, demonstrating that employers would not recognize the PCDT as an additional skill or expertise beyond what would normally be required of a pharmacist.

“Knowing private companies...they are going to make us do the job and another thing that I'm sure of is they are not going to regard the course as part of...they are not going to increase your salary. At the end of the day, private companies won't feel it like it's an addition” (P2)

Subtheme 6: Lack of support from medical doctors

Most participants expressed concern about their relationship with the doctors becoming more strained, owing to the historically strained relationship between a doctor and a pharmacist. It has been reported that doctors may perceive pharmacists as competitors, and as a result, are afraid of losing more customers to pharmacists with the expansion of pharmacists' role to prescribing.

“There is a conflict between the pharmacists and the doctors, they might question why we are going beyond our scope, there is already a clash between these two.” (P4)

“I think the challenge may be the fact that most doctors may feel like we are competing with them. I believe that they will feel like the market will no longer be there for them, so it will be like their course is irrelevant at some point as most customers will just come to the pharmacy to get the service.” (P1)

Some indicated that the reason for the slow progression of pharmacists' prescribing role is that doctors have been involved in its development from the start, impeding its full implementation.

“You'd have challenges there and relationships with other healthcare professionals especially your original prescribers. They are not happy about it, and they have been trying to block this thing ever since it was mentioned. So, relationships will be strained.” (P8)

Subtheme 7: Limited scope of practice by prescribing pharmacists

Most participants expressed concern about their relationship with the doctors becoming more strained, owing to the historically strained relationship between a doctor and a pharmacist. It has been reported that doctors may perceive pharmacists as competitors, and as a result, are afraid of losing more customers to pharmacists with the expansion of pharmacists' role to prescribing. The limited prescribing scope, on the other hand, dissatisfied some participants. They claimed they are familiar with all the drugs and did not see the necessity for restrictions in terms of scope of practice after qualifying as prescribers.

"I don't really think that it's necessary for us to be restricted since we know from schedule 0 to schedule 6. We know the relevant diagnosis, the treatment of medications of each drug." (P2)

It was also highlighted that there would be a conflict of interest in pharmacies that already employed a prescribing nurse because, after completing the prescribing course, pharmacists will prescribe up till to schedule 4, which is essentially the same scope of practice as that of a prescribing nurse.

"In our working setting we have a clinic with a prescribing sister, so I think that introduction of the role of prescribing by pharmacist will be a conflict of interest as well if we pharmacists do a prescribing course, yet we have a prescribing sister. So, it will work whereby you don't have a sister in the pharmacy." (P1)

Theme 3: Recommendations to address the identified barriers

After identifying the barriers to the implementation of the prescribing role, the participants recommended the following to enhance pharmacist prescribing at community pharmacies:

Subtheme 1: Additional PCDT training institutions to promote enrolment

There is currently only one training institution that offers the PCDT qualification, and that is North-West University,

which is in the North-West province.[20] It was suggested by the participants that more PCDT training facilities be opened in South Africa to promote enrolment and expand the course's accessibility for pharmacists who wish to advance their clinical knowledge. Having multiple training institutions will give pharmacists an opportunity to choose the institutions of their preference.

Subtheme 2: Hiring of PCDT pharmacists in community pharmacies

With the National Health Insurance on the implementation phase, improvements within the health care system are needed to ensure that South Africans receive high-quality healthcare. Community pharmacies in South Africa present a unique opportunity to lessen the pressure on the public health system. The participants therefore recommended that PCDT pharmacists be hired by community pharmacies to precisely diagnose, prescribe, and dispense medication for certain conditions in accordance with the primary healthcare standard treatment guidelines and the essential medicine list.

Subtheme 3: Strengthening collaboration amongst stakeholders

The participants highlighted that the expansion of the roles of pharmacists to include prescribing medication for specific conditions will cast doubt from medical doctors regarding the separation of functions and its maintenance. Therefore, to prevent other professionals from being unsupportive, the participants suggested that ongoing advocacy for changes in pharmacy practice be done with the stakeholders at all levels of government. The Health Professional Council of South Africa and the South African Pharmacy Council must work together to develop laws, regulations, and policies pertaining the prescribing role of pharmacists. Furthermore, the participants suggested increasing awareness within communities and other professional groups.

Subtheme 4: Reduce limitations on the diagnosis and treatment of minor conditions

Upon completion of the PCDT program, pharmacists are granted a broader scope of practice, which enables them to diagnose and prescribe in accordance with a primary health care conditions list periodically released by the National Department of Health. Even after the additional training has been completed, there are still restrictions on the conditions that can be diagnosed and prescribed. The participants recommended that there should be no limitations especially when coming to the diagnosis and treatment of minor conditions. The knowledge acquired during the undergraduate studies, the pharmacist-initiated therapy skills, and the knowledge acquired during the PCDT training is sufficient for pharmacists to prescribe for minor conditions without any limitations.

Discussion

The findings of this study reveal that community pharmacists are ready to assume the responsibility of prescribing. These findings are consistent with a study in California which found that 68.9% of community pharmacists are willing to prescribe medications to pharmacy customers if permitted by law.[21] Furthermore, the results of this study also align with those of a prior study among Saudi Arabian community pharmacists, which discovered pharmacists had the necessary knowledge and were prepared to prescribe oral contraceptives.[22]

Lack of awareness on PCDT program was found to be a barrier to the emerging role of prescribing by pharmacists. To practice as a licensed pharmacist prescriber in South Africa, one must possess the postgraduate qualification known as PCDT diploma.[23] In order to offer pharmacist-initiated therapy within the parameters of Good Pharmacy Practice regulations, pharmacists must be equipped with the fundamental knowledge in the fields of pharmacotherapy and

pharmaceutical care, which is the goal of PCDT training.[24] The diploma seeks to increase the pharmacological and clinical knowledge that were attained during the pharmacy degree program.[12] Only those with bachelor's degree in pharmacy, or an equivalent qualification, and a minimum of two years of experience in a clinical setting, excluding community services, are permitted to enrol in this course.[24]

Given the increasing demand for primary healthcare services and the looming shortage of doctors, extending the roles of pharmacists is a key program for resolving this problem. Nonetheless, expanding the pharmacist's responsibilities by allowing them to prescribe is a difficult task because the successful transition in prescribing requires specialized training, equipment, and stakeholders' collaboration.[11,25] In order to deliver the best possible patient care as prescribers, pharmacists ought to possess advanced clinical skills and be aware of situations in which they may only have a minimal ability to examine, diagnose and treat the conditions they are presented with. Parallel to our study findings, the pharmacists' prescribing role has been hindered by a lack of skills as noticed in countries like Sudan, China, Nigeria, Nepal and Japan.[11, 25-29] Additionally, community pharmacists and medical groups in Canada expressed issues about insufficient diagnostic skills, patient safety, and access to medical information.[30] However, this barrier can be overcome if community pharmacists take the initiative to improve their knowledge of different diagnosis and treatment interventions.[31]

Lack of dedicated time for prescribing, inadequate infrastructure to provide prescribing services, lack of recognition from employer in terms of remuneration and posts and lack of support from medical doctors was also perceived as organisational barriers in our study. In accordance with our study, community pharmacists in Zimbabwe highlighted several obstacles to the implementation of expanded pharmacy

services, including the lack of private consultation rooms and appropriate pharmacy infrastructure, the pharmacists' abilities to take on new responsibilities, and reimbursement methods for the extended services.[32] Our findings are also congruent with a study which assessed California community pharmacists' intent to prescribe hormonal contraception, which identified pharmacist time constraints as one of the barriers to prescribing hormonal contraceptives.[31] The need to modify infrastructure to manage the appointments is one of the obstacles to the pharmacists prescribing role's implementation. Besides the infrastructure issue, equipment is needed for physical examinations of patients, conduct laboratory tests, and the pertinent documentation or software needed to keep medical records and place orders for laboratory evaluation tests.[12, 33] All the aforementioned developments come at a price that pharmacists must incur.

As highlighted above, the successful transition in prescribing requires stakeholders' collaboration. In primary healthcare settings, inter-professional teamwork between pharmacists and doctors has been associated with better patient outcomes.[34, 35] In our study, pharmacists highlighted lack of support from medical doctors as the possible barrier to extended roles of prescribing by pharmacists. Our results are consistent with studies that explored hospital pharmacists' desires and willingness to implement prescribing in Qatar and Nigeria, which indicated that physicians' reluctance was the most often stated barrier to pharmacists prescribing.[11, 36] Additionally, the results of our study and a systematic review on stakeholders' perspectives with pharmacist prescribing also shared certain similarities.[37] In the aforementioned review, doctors are concerned about lack of clinical examination and diagnosis abilities among pharmacists; pharmacist's inability to access the medical records of specific patients; a possible harm to the doctor-patient relationship; legal concerns like the division of clinical obligation of care;

and communication problems between the pharmacists and other healthcare professionals.[37] Nordin and colleagues,[38] concur with the statement by postulating that the relationship among doctors and community pharmacists may be simplified if community pharmacists handle communication with doctors in a disciplined manner without interfering with the roles of doctors. Inadequate organizational and management team support was cited as a barrier in the United Kingdom,[30] along with a lack of time set aside for necessary training or prescribing practice, as well as a lack of support staff to verify prescriptions.

Limited scope of practice by prescribing pharmacists was highlighted as dissatisfaction amongst pharmacists who are willing to become prescribers. In accordance with Section 22A(15) of the Medicines and Related Substances Act 101 of 1965 (or its predecessor), pharmacists who have completed supplementary training in PCDT and registered such course with the SAPC may prescribe medications in accordance with the STG & EML as approved by the National Essential Medicines List Committee; however, such prescription is limited to certain conditions. This practice restriction is not exclusive to South Africa. Many countries, including Australia, the United States, Canada, and New Zealand have given community and hospital pharmacists the right to prescribe, adopting a variety of strategies, including collaborating with doctors to prescribing, however such prescribing is from a limited formulary.[25, 39] Although community and hospital pharmacists are given authority to prescribe in different countries, various prescribing paradigms, such as dependent, independent, and collaborative prescribing, define restricted degrees of prescribing authority.[40, 41]

Strengths of the study

Methodologically, this study used an explorative technique. This technique helped the researchers gain a comprehensive insight of community pharmacist's views regarding perceived barriers to their emerging role

as prescribers. Different strategies were employed during the study process to address the trustworthiness.[42] The interview transcripts were not returned to the participants for confirmation. However, during data collection member checking was done. Furthermore, two authors (TA and NB) verified the transcripts against the audio recordings.

Limitations of the study

The findings of this study reflect the opinions of community pharmacists in Polokwane only and cannot be generalized to other settings. Therefore, the findings should be interpreted with caution as pharmacists from other districts and provinces were not included. This study only looked at a small number of pharmacists, so more investigation is required to fully grasp the national and international obstacles to pharmacists' prescribing practices. Since stakeholders' collaboration is necessary for an effective transition in pharmacists' prescribing, further research should be done to determine how stakeholders (e.g. doctors, patients, nurses) view pharmacists' role in prescribing.

Conclusion

Prescribing by pharmacists is a great initiative that will strengthen the health system, however, the identified barriers need to be addressed to ensure that prescribing pharmacists offer safe and effective patient-centred healthcare. A coordinated effort is therefore necessary for the formulation of clear policy frameworks, including more training facilities, increasing stakeholder awareness to support pharmacist prescribing, and identifying financial, infrastructure, and other resource demands to support the smooth integration of pharmacist prescribing role. To overcome the aforementioned barriers, the SAPC should make the extended role of prescribing by pharmacists and PCDT course known amongst practicing pharmacists via press conferences, publications, and mails. This should be done in detail to ensure that pharmacists are aware of the required

prescribing competency and subsequent equipment, devices and other relevant processes involved with prescribing. This will also help to eliminate the perceived structural barriers to the implementation of the role. New post for prescribing pharmacists should be introduced to establish the differences in roles and responsibilities between authorized prescriber-pharmacists and those without the qualification and authority to prescribe. This will also enable appropriate remuneration of those with the qualification and responsibility to fulfil the role. The SAPC should ensure that there is clear distinction between the scope of practice of authorized prescribing pharmacists and non-prescribing pharmacists.

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Authors' contribution

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Conflict of Interest

The authors declare no conflicting interest.

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