



RESEARCH ARTICLE

THE EVOLUTIONARY ROLE OF PHARMACISTS IN ASTHMA MANAGEMENT

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ABSTRACT

With an increasing prevalence, asthma continues to be a significant public health problem, as is the case in the urban setting of the Accra Metropolis. This study examined the changing role of community pharmacists in asthma care by reviewing what they knew, what they did, and what barriers might be to their ability to provide optimal care. The data were collected using a structured questionnaire, cross-sectionally surveying 177 pharmacists to obtain self-reports on demographics, asthma knowledge, practice, and barriers. Descriptive statistics and the results were presented as data analysis frequencies and percentages. The results indicated that pharmacists possessed a good knowledge of asthma management (55.93%), a good understanding of pathophysiology, and the use of devices like peak expiratory flow (PEF) meters. However, only 49.15 % regularly counselled patients on inhaled corticosteroid (ICS) adherence, and only 18.64 % ensured that patients had asthma action plans, highlighting practice gaps. The key barriers were no asthma action plans (81.4%), inadequate training (64.4%), and insufficient consultation spaces (52.5%). 52.5% of pharmacists complained of time constraints, while 55.9% of patients could not make time for counselling. The findings suggest that there is a potential for pharmacists' integration into formal frameworks of asthma care, provision of financial incentives, and provoking the public to view pharmacists as key players in asthma care. The measures could boost pharmacists' ability to give total asthma care to patients located in Greater Accra and other urban areas.

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INTRODUCTION

Asthma, a chronic disease, exerts a physical and socioeconomic burden on patients, their families, and healthcare providers. It occurs in all age groups. In 2019, 263 million people across the globe were affected, with 455,000 deaths (1). In 2025, about 400 million people will be affected (2). This translates into about one in every 250 deaths worldwide, particularly in exacerbations (3). Even though evidence-based strategies exist to control asthma in low and middle-income countries (LMIC) such as Ghana, asthma is poorly controlled because of systemic healthcare challenges (4). An estimated Ghanaian population prevalence of asthma is 6 - 7%, with cases evidencing an inclination to increase in Accra Metropolis with the high degree of urbanization, environmental pollution, and exposure to allergens. The growing burden has an answer that relies on a multidisciplinary approach in which community pharmacists are key players.

Pharmacists' role: Pharmacists have historically been analyzers who only dispense patients' medication. However, their role has significantly evolved into directing patient care for chronic diseases such as asthma (5). Even now, we acknowledge that community pharmacists have an important place at the heart of healthcare as

patient educators to monitor adherence and treatment outcomes and collaborate with other health professionals to improve patient care. In countries where the healthcare systems are swamped, pharmacists provide accessibility to patients and attend to drug interaction issues. They are thus vital contributors to asthma management. Despite this, pharmacists have not fully integrated into formalized asthma care frameworks in Ghana. Deficiencies in the availability and supply of resources, training, and structural support for most pharmacists in the Greater Accra Region result in varying practices and sub-optimal patient outcomes. There are three advantages to being a pharmacist when caring for an asthma patient. First, based on patient management skills, the pharmacist can discuss patients' concerns and fears in taking their medications and provide training to the patients on breathing techniques and how to control the side effects of the drug. As the National Governors Association underscores, pharmacists can provide direct health care to patients in an integrated system (6). Moreover, pharmacists are easily accessible compared to other healthcare professionals (HCPs) and are frequently the first point of contact in community settings and the healthcare system. Thus, pharmacists have the potential to advise regarding preventive care for chronic diseases (e.g. screening and advising their patients and making referrals to other HCPs for follow-up care (7, 8). Because pharmacists interact with patients continuously during prescription

refills, they can become active in asthma management due to their knowledge of medications (5). The NHLBI guideline emphasizes the role of pharmacists in educating others to manage asthma and performing therapeutic management. Studies with pharmacist-led interventions have been conducted in different practice settings (e.g., community pharmacies, inpatient admissions, and outpatient clinics) and different practice models (e.g., telemedicine and asthma education programs), and results of these interventions can be transferred to other practice settings and practice models (9). Pharmacists also help patients develop asthma action plans and how to follow them. An essential part of self-management is written action plans that allow for the detection and early treatment of exacerbations (10). Asthma action plans include information on medications and amounts to take, how to tell when symptoms are worsening, and what you should do in an emergency. The best way to improve your asthma outcomes is to have written action plans (i.e., information on when and how to increase your dose, how long how to continue using your reliever medication, and when to see your HCP) that HCPs can give you and make sure they are sticking to them to maximize your adherence and minimize your errors (11, 12).

Asthma Management: Asthma management requires proper diagnosis, good medication use, patient education, and monitoring. International guidelines such as the Global Initiative for Asthma (GINA) explain that patient-centred care and shared decision-making are crucial for success in asthma control (13). It then outlines how pharmacists can contribute to these goals through interventions, for example, assessing inhaler techniques, providing ICS adherence counselling, and developing personalized asthma action plans. Studies from high-income countries found pharmacist-led asthma education programs to lower hospitalizations and improve asthma symptom control and quality of life (14). However, in the context of LMICs, systemic barriers, such as the lack of training opportunities, large volumes of patients to see, and lack of infrastructure, prevent pharmacists from fully adopting these expanded roles. Community pharmacies tend to be the first place to obtain asthma care and are pretty helpful for underserved communities. There are a lot of instances, including a lack of formal training in asthma management and inconsistent access to tools for diagnostic purposes, such as peak expiratory flow (PEF) meters and designated areas for private conversation with patients (15, 16). Additionally, cultural and societal demands for pharmacists' role in asthma care limit their participation as asthma care providers. It has been argued that many patients and some pharmacists do not view asthma management as a pharmacist's responsibility (20). Considering the rise of chronic diseases and the need for competent and readily accessible healthcare providers, pharmacists' roles have become crucial. Pharmacists can improve asthma outcomes through patient education, compliance monitoring, and collaboration with other health professionals, and they have demonstrated the potential for this in several settings and countries. Our findings suggest the unexploited potential of pharmacists to make meaningful contributions to asthma care in Greater Accra. However, healthcare systems must undergo a paradigm shift to integrate pharmacists thoroughly.

A case study of pharmacists' secondary role in managing asthma in the Accra Metropolis of the Greater Accra Region is presented. This paper seeks to understand better the opportunities and barriers pharmacists face operating in this environment by examining their knowledge, practice, and barriers to care. It suggests improving policy, structure, training, and public education. Closing these gaps will allow pharmacists to utilize their newfound role in assisting with better asthma management and helping improve outcomes.

METHODS

This research used a cross-sectional study to determine the changing nature of community pharmacists' involvement in asthma care in the Accra Metropolis of the Greater Accra Region. Cross-sectional studies help collect participant data at a single time point.

As no data regarding the efficacy of asthma management knowledge or practices and pharmacists' perceptions over time are available, cross-sectional data on these aspects are relevant to evaluating current knowledge and practice trends among pharmacists to inform practice improvement in asthma management. The assessment approach adopted in this study was structured to separately assess these attributes and map out foci for practice improvement.

Study Design and Setting: The setting for the current study was the Accra Metropolis, one of the most populous urban areas in the Greater Accra Region of Ghana. Accra is the country's capital city and boasts many community retail pharmacy outlets that are important sources of medical care products. While operating in this setting, community pharmacists perform numerous functions, including dispensing prescriptions and general health advice. The study selected these pharmacists because they are available healthcare practitioners who can help manage chronic ailments such as asthma.

Study Population: The target population included all registered community pharmacists in the Accra Metropolis. Due to their tasks, which include dispensing asthma medicine and engaging the patient, these pharmacists are bound to offer significant insight into the dynamism of asthma management in the concerned study area.

Selection Criteria and Exclusion Criteria

To ensure the study's relevance and reliability, specific inclusion and exclusion criteria were applied:

Inclusion Criteria

- Pharmacist registered with the Pharmacy Council of Ghana.
- Practising in community pharmacies within the Accra Metropolis.
- Consent to participate and be available when the data is collected.

Exclusion Criteria

- Pharmacists who work in settings other than in the community.
- All the pharmacists work in facilities in different regions of Ghana.
- Those unwilling to participate or could not be reached during the data collection period.

Sample size objective and sampling method. The sample size was determined using Cochran's formula for sample size calculation in cross-sectional studies:

$$n_0 = Z^2 \cdot p \cdot q / d^2$$

Where:

- Coefficient $Z=1.96$, corresponding to a 95% confidence level.
- $p=0.88$, the estimated proportion of pharmacists demonstrating feasibility in expanding their roles.
- $q = 1 - p = 0.12$, the proportion not meeting the criteria.
- $d=0.05$ is the margin of error.

Substituting these values, we get an initial sample size of $n_0=162$. Given the finite population of approximately 1,751 registered pharmacists in the Greater Accra Region, Cochran's correction formula was applied:

$$n = n_0 / 1 + (n_0 - 1) / N$$

Where $N = 1751$. The rationale for correcting the above sample size is to achieve an accuracy of plus or minus 5 percent. Thus, the corrected

sample size was about 148, but a sample size of 177 was selected for increased reliability. A convenience sampling procedure was used in this study to select the participants. This method was used for pragmatic reasons, and the study intends to recruit only participants who volunteered and showed interest in the study. This approach might have its downside of introducing selection bias; however, by so doing, we were able to complete the questionnaires quickly and, at the same time, ensure we included as many practicing pharmacists as possible within the facilities located in the metropolis.

Data Gathering Tool: This study's structured questionnaire formed the basis of data collection. This questionnaire was constructed according to the literature, asthma management guidelines, and the study's objectives. It consisted of four key sections:

- **Demographic Characteristics:** Recorded variables included age, gender, education level, years of practice, work hours, and the average number of patients dealt with.
- **Knowledge of Asthma and Its Management:** We evaluated pharmacists' knowledge about asthma etiology, initiators, treatments, and spirometry, naming PEF meters.
- **Management Practices:** Assessed non-emergency visits for shortcomings in a focused history, limitations in respiratory technique investigation, nonadherence to inhaled therapy, and lack of asthma management plans.
- **Barriers to Effective Asthma Management:** Emergent barriers in the study included inadequate training, restricted infrastructure, and beliefs about pharmacists' role in asthma management.

The compiled questionnaire was pretested on 10 pharmacists in a neighbouring region to fine-tune the questions' clarity, relevance, and reliability. Responses to the items in the pretest were employed to review the correct direction and scale of the instrument to meet the study's objectives.

The procedure of data collection: Data collection took place over four weeks. Two trained Research assistants helped the principal investigator distribute the questionnaires. This research was conducted among the workplace staff. Participants were informed about the research's goals and aims, and their consent was sought afterward. Here, it was done so that all participants filled out the questionnaire alone, and all the completed ones were fetched as soon as possible to avoid a low response rate. Anonymity and privacy were ensured by sorting coded responses and securing the complete questionnaires.

Data Analysis: To create a database, all the collected data were checked for completeness and accuracy. The quantitative analysis used frequencies, percentages, and graphs to summarize the findings, coupled with descriptive statistics.

The analysis focused on three primary areas:

- **Knowledge Assessment:** The asthma management competency assessment of pharmacists used key questions answered, and the responses were graded as good, moderate, or poor.
- **Practice Evaluation:** The outcomes included the number of well- and poorly managed practices, as defined by compliance with evidence-based asthma care processes.
- **Barrier Analysis:** The relative frequency and impact of the reported barriers were used to determine the most critical obstacles.

All analyses were conducted using the statistical software STATA I/C 23.

Ethical Considerations: The study followed ethical principles to ensure that the rights of the participants were protected. We sought Ethical approval from the University of Ghana School of Pharmacy and Ethics Committee (UGSOPEC/AC2021-2022/017). After explaining the objectives, methods, and measures of anonymity of the

research to be conducted, we sought the participants' consent. All those involved in the study responded voluntarily and could withdraw from the study at any given time without further persuasion.

Strategic action plan and analysis: These methodological advancements were developed to capture the dynamism and complexity of pharmacists' roles in asthma treatment. The study brought together demographic data, knowledge assessments, practice evaluations, and barrier analysis, which provided a complete picture of the challenges and opportunities in pharmacists' practice in Accra Metropolis.

The knowledge part of the questionnaire referred to aspects of asthma management from fundamental to practical levels, including identifying asthma triggers, the pattern of treatment, and the approaches to using monitoring devices. It also allowed the analysis to embrace theoretical concepts and practical knowledge gained in the field. Substantial feedback concentrated on historical facts, adherence control, examination of inhaler demonstration, or other ascertaining areas. These activities are integral to treating asthmatic patients and were compared with best practice guidelines to determine areas of weakness and absence of compliance. The barrier analysis pointed to system—and person-level factors such as a lack of training opportunities, resources, and time. Thus, quantifying these barriers helped identify specific focus areas in future work. The analytical approach highlighted data mining more in the aspect of pattern recognition. For example, knowledge level was checked in different population samples to find whether differences existed in the level of preparedness for expanded roles based on educational status or years of practice amongst pharmacists. Likewise, to look at the possibility of an association between reported barriers, the barriers identified were coded and compared with inconsistencies in practices.

Limitations: While some limitations do exist, they do not affect the strength of the research methodology. Convenience sampling may have limitations of selection bias; the study was conducted on available and willing pharmacists. Moreover, overreliance on self-generated reports may lead to socially desirable response bias, where the participants supply data they consider desirable instead of reflecting current practice. The outlined limitations do not preclude the recognition of potential benefits that the offered methodology can evoke in studying pharmacists' shifting role within the asthma management process. Consequently, the study gives important information on research and practice, inter-professional differences, and existing systems that help design interventions to increase pharmacists' positive impact on asthma care in Greater Accra.

RESULTS

This study brings to light the growing significance of pharmacists in the management of asthma in the Accra metropolis and the stark contribution to the increasing number of this class of health personnel to complement that of the traditional health practitioners; on the other hand, it also illustrates areas of concern despite the advances made. The data affords us insights into their professional practices, knowledge base, and the constraints that prevent further development of their role in managing chronic disease. The results illustrate the pharmacists' readiness to take on broader responsibility in asthma care and a starting point for addressing the existing limitations.

Demographic Characteristics: The 177 pharmacists surveyed were a large cohort of diverse ages, with the most significant representation of younger professionals aged 21-30 (42.37%) and 31-40 (27.12%) visualized in Figure 1. The alignment with this age distribution is that a workforce is relatively early in their careers and is poised to adapt and evolve, expanding into professional roles. The study participants had a gender distribution with 55.93% of respondents as males and 44.07% as females (Figure 2). The majority of pharmacists (72.88%) were educated to a Bachelor of Pharmacy degree (BPharm) level,

while a Doctor of Pharmacy (11.86%) or a Master’s degree (15.25%) was attained by others (Figure 3).

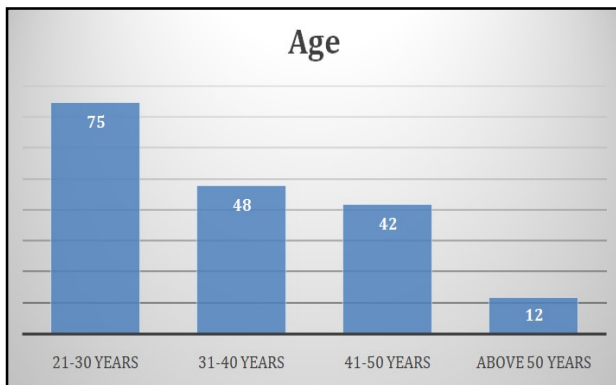


Figure 1. Age of the Participants (where N=177)

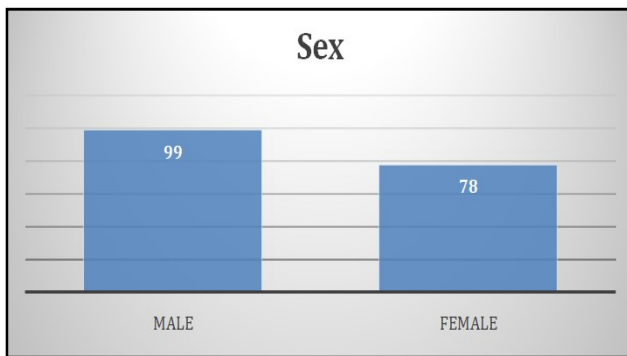


Figure 2. Gender distribution among study participants

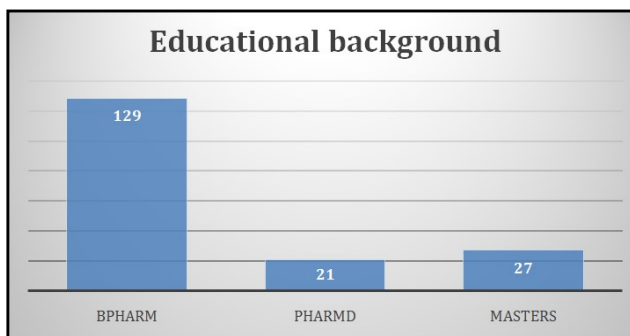


Figure 3. Educational background of study participants



Few were trained in specific fields, such as asthma management, but there was a strong, provable background in pharmaceutical sciences.

Knowledge and Understanding of Asthma: Pharmacists were very knowledgeable about asthma as a chronic disease that requires long-term management. A universal understanding of the fundamental pathophysiology of asthma was reflected in the fact that all

respondents recognized it as a condition of airway hyperresponsiveness and obstruction. Notably, genetic predisposition to allergens was named by 93.22% as a significant factor driving asthma development, indicating a recognition of the multicausal nature of the disease.

More importantly, 94.92 percent of respondents were familiar with using the peak expiratory flow (PEF) meter, which is crucial in monitoring pulmonary function. Despite these promising indicators, knowledge was not uniformly distributed. Overall, 55.93 percent of pharmacists scored above 80% on the assessment and had good knowledge (cumulative 55.93%), while 42.37 percent had moderate knowledge (cumulative 98.30%), and 1.69 percent had poor knowledge (cumulative 100%) of genomics. These variations indicate the potential of targeting specific training to fill knowledge gaps, specifically for less experienced pharmacists. Table 1 shows the key areas, such as promoting written asthma action plans and consistent ICS, that remain underutilized, limiting their complete alignment with international guidelines like GINA by pharmacist practices.

Table 1. Practices Reflecting the Evolving Role of Pharmacists

Practice	Percentage of Pharmacists	Alignment with International Guidelines
Assessing inhalation techniques	73.68%	Aligns
Discussing treatment side effects	79.31%	Aligns
Conducting detailed history-taking	57.65%	Partial alignment
Counselling on adherence to ICS use	49.15%	Partial alignment
Ensuring written asthma action plans exist	18.64%	Not Aligned
Discussing patient treatment preferences	60.34%	Partial alignment

Evolving Role Reflected in Practices: The study finds that pharmacists in Accra Metropolis are becoming more willing to participate in the expanded duties associated with asthma care. Many (73.68%) assessed the inhalation tool, patients were educated on medication side effects (79.31%), and patients discussed adherence to treatment plans (60.34%). These practices reinforce the increasing emphasis on patient education and support, which is essential to successful asthma management. However, there is a critical gap. For example, only 18.64 percent of pharmacists ensured patients had written asthma action plans, a tool strongly recommended by international guidelines for guiding self-management. Similarly, almost half of the respondents (49.15%) commonly spoke with patients about the regularity of inhaled corticosteroids (ICS), indicating that many pharmacists are not maximizing their position to reinforce adherence with maintenance therapy.

Barriers to Expansion of Roles: This study identified systemic and structural barriers preventing pharmacists from fulfilling their evolving role in asthma care, which are Visualized graphically in Figure 5. Of the 81.4 percent who reported the most frequently mentioned barrier being a lack of asthma action plans in community pharmacies, 87.5 percent stated that 80 percent depended on the phone number of the asthma nurse for the consultation. Without these standardized tools, pharmacists may be challenged to be consistent and evidence-based in delivering exacerbations and long-term symptom care.

A second major challenge was the poor infrastructure, with 52.5% of the pharmacists reporting the absence of designated pharmacy consultation areas. Private spaces are critical to assessing, educating, and building patient trust. They also pointed to training gaps, as 64.4% said they received little opportunities for continuous professional development (CPD) in asthma management. This limitation limits pharmacists’ ability to keep up, meaning inconsistencies in care delivery. Perverse time constraints unearthed

through the phenomenon were time constraints faced by pharmacists and patients. About half of the respondents (52.5 percent) indicated insufficient time to give comprehensive care because of high patient volume and competing responsibilities. In addition, asthmatics were reported by 55.9 percent of patients to have little time for detailed consultations, making it difficult to provide good asthma care. Finally, there was a significant perceived barrier around the role of pharmacists.

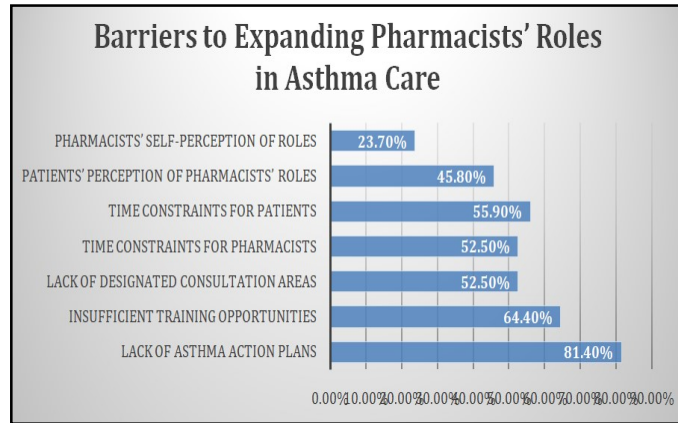


Figure 5. Percentage of pharmacists identifying this barrier

More than 45.8% of pharmacists said patients do not consider asthma management their responsibility, and 23.7% of respondents were unsure of their role in asthma management. Broadly, they represent problems with redefining the role of pharmacists in the healthcare system. A second major challenge was the poor infrastructure, with 52.5% of the pharmacists reporting the absence of designated pharmacy consultation areas. Private spaces are critical to assessing, educating, and building patient trust. They also pointed to training gaps, as 64.4% said they received little opportunities for continuous professional development (CPD) in asthma management. This limitation limits pharmacists' ability to keep up, meaning inconsistencies in care delivery. Perverse time constraints unearthed through the phenomenon were time constraints faced by pharmacists and patients. About half of the respondents (52.5 percent) indicated insufficient time to give comprehensive care because of high patient volume and competing responsibilities. In addition, asthmatics were reported by 55.9 percent of patients to have little time for detailed consultations, making it difficult to provide good asthma care. Finally, there was a significant perceived barrier around the role of pharmacists. More than 45.8% of pharmacists said patients do not consider asthma management their responsibility, and 23.7% of respondents were unsure of their role in asthma management. Broadly, they represent problems with redefining the role of pharmacists in the healthcare system.

DISCUSSION

Within the Accra Metropolis, the findings of this study demonstrate both the critical but changing role of pharmacists in asthma management and the need for specialists in this area of pharmacy. Pharmacists demonstrate commendable baseline knowledge, yet systemic, structural and perceptual barriers constrain the practice of pharmacists and their ability to expand their roles. These results are concordant with global literature and offer the opportunity to place challenges and potential opportune interventions to improve asthma care delivery in Ghana. High pharmacists' knowledge of asthma pathophysiology, triggers, and diagnostic tools was noted as excellent, with 55.93% having good knowledge. This mirrors a whole-based understanding that mirrors studies completed in comparable contexts. A Nigerian study showed that community pharmacists displayed a high degree of theoretical understanding of chronic respiratory conditions. Still, they could not apply theoretical knowledge consistently to practice due to systemic constraints (17). Similarly, in

India, pharmacists were found to be knowledgeable about asthma medications, yet patient education and adherence monitoring by pharmacists were lacking (18). The second set of parallels suggests that Ghanaian pharmacists' ability to fill that void is underutilized.

There were also apparent gaps in practice despite that knowledge. 73.68 percent of pharmacists assessed inhaler technique, 80.31 percent discussed treatment side effects, and only 49.15 percent regularly counselled patients on the consistent use of inhaled corticosteroids (ICS). Poor adherence is linked with increased exacerbations and hospitalizations (GINA, 2023) (19). This has a limited emphasis on ICS counselling; pharmacists in Accra may benefit from additional training to focus on adherence strategies and patient communication. A study of asthma in the United Kingdom found that adherence interventions led by pharmacists, including regular follow-up with regular education on ICS use, improved asthma outcomes (20). Such interventions could be adapted to the Ghanaian context in such a way as to bolster pharmacists' role in asthma management. Nonetheless, a key gap was a lack of attention to asthma action plans: only 18.64% of pharmacists routinely ensured their patients had these essential artifacts. Self-management with asthma includes a cornerstone of getting an asthma action plan, which gives patients instructions on recognizing and responding to asthma symptoms. Recent studies have consistently demonstrated that asthma action plans effectively decrease symptom control and the number of exacerbations and increase patient confidence in self-management of their disease (21). A broader system problem lies in the absence of such plans for community pharmacies in Accra. GN has no formal structures to integrate pharmacists into chronic disease chronic disease chronic disease chronic disease chronic disease management frameworks. To address this gap, policy-level changes are needed, such as putting pharmacists in a position to develop and design standardized care protocols within the city or health system frame.

Various barriers to optimal asthma management reported in this study are comparable to those experienced worldwide. A lack of asthma action plans was the most common barrier mentioned by 81.4 percent of pharmacists. These results are consistent with what has been observed in other LMICs in which resource limitations and fragmented healthcare delivery have precluded the adoption of standardized management tools (22). These factors limit pharmacists' ability to provide comprehensive care, as they do not include private consultation spaces (52.5%). Facilitating detailed consultation about asthma management is essential, and consultation areas are also crucial to building patient trust. Private spaces in pharmacies are also important, as research from Canada indicates they make patients more satisfied and engaged in chronic disease management (23). Another big gap was in the training: 64.4% of pharmacists claimed that the continuous professional development (CPD) opportunities were insufficient. Pharmacists must keep pace with the changes in evolving guidelines and emerging therapies, particularly in chronic conditions like asthma that necessitate detail in the face of such a complex condition. The literature review showed that CPD programs meant explicitly for community pharmacists significantly enhanced CPD pharmacists' ability to counsel patients and adherence rates to treatment plans (24). Similar programs could be implemented in Ghana to address knowledge and practice gaps, empowering them to employ evidence-based strategies.

Time constraints (reported by 52.5% of pharmacists and 55.9% of patients) reflect broader problems in healthcare delivery in resource-limited settings: high patient volumes and low staffing limit thorough consultations in community pharmacies. A similar barrier is not unique to Ghana; other studies from developed and developing countries confirm that time constraints often preclude engagement between pharmacists and patients beyond a note or medication therapy review (25). For this problem, we should change the structure, hire new employees, or mark a specific hour or day to note that metabolic issue. A significant challenge lies in perceptions of the pharmacists' roles. About half (45.8%) of pharmacists report that patients do not see asthma management as the pharmacist's

responsibility, and 23.7 percent of pharmacists' reporters themselves do not know what their role in managing the disease asthma is. This finding is based on previous literature, where pharmacists in other LMICs are also commonly regarded as dispensers rather than healthcare providers (26). To redefine the role of pharmacists in chronic disease management, public education campaigns and professional advocacy are necessary to shift focus from pharmacists being only a part of a medication delivery process to pharmacists' potential to impact health outcomes. This offers essential lessons for addressing these challenges, which international studies illuminate. For example, pharmacist-led asthma education programs in Australia were associated with significant power of medication adherence and symptom control (27). Pharmacists were trained in motivational interviewing, personalized counselling, and follow-up interventions. Such models were adapted to the Ghanaian context, and implementing policy changes to incorporate pharmacists into multidisciplinary care teams could considerably change asthma management in the Accra Metropolis.

CONCLUSION

This study's findings underscore pharmacists' evolving role in managing asthma in the Accra Metropolis and their potential contribution and barriers to their contribution. Although pharmacists have a solid baseline knowledge of asthma management, inconsistency in practice, lack of resources, and systemic obstacles prevent pharmacists from fully providing comprehensive care. The asthma action plan lacks training, inadequate infrastructure, time limits determine efforts, and pharmacists are perceived with their roles. To address these barriers, a multi-faceted approach must be used. Asthma action plans and providing private consultation spaces in community pharmacies must be adopted, and pharmacists must build formalized asthma management frameworks. Focus should be placed on continuous development programs targeted at asthma care to strengthen pharmacists' skills and confidence. Campaigns on public education are also needed to update the pharmacist's role and the patient's trust. Addressing these challenges will enable pharmacists in the Accra metropolis to significantly impact asthma outcomes, lower healthcare costs, and improve patient quality of life. The findings of this study suggest a roadmap for policymakers, educators, and healthcare providers to embrace the evolving role of the pharmacist in chronic disease management.

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