Decolonizing Pharmaceutical Services and Professionalism: Toward Equity and Inclusivity in Integrative Healthcare in Ethiopia

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Abstract

Despite being highly accessible healthcare workers, pharmacists are often viewed as supportive and ancillary workers rather than integral members of the healthcare team. In contrast to the current global professional development, the pharmacy profession in Ethiopia has been neglected. This perception is reflected in the Ethiopian Ministry of Health's characterization of pharmacy services as the "last stage for client services" in its national hospital services transformation guideline. Additionally, one of the "biggest pathologies" of pharmacy professional practice and ethics is the commercialization of pharmaceutical services and professional licenses. The authors believe that the current pharmacy practice and professionalism should be decolonized in Ethiopia. In this context, we have compiled existing data that indicates the need for the decolonization of pharmaceutical services and professional dedication to their profession. The second is the "decolonization of pharmacy knowledge and practice" from third parties. This will involve considering the professional worth and skill of pharmacists' professional development and careers, as well as preconceived conceptions. Third, the recognition of pharmacists' professional worth and skills by all healthcare stakeholders. We believe that by making the professional activity of all pharmacists visible and addressing the challenges they face, tomorrow's healthcare system can better utilize the expertise and accessibility of pharmacists to provide effective and efficient care.

Keywords: Decolonization, Pharmaceutical services, Professionalism, Pharmacists

INTRODUCTION

Globally, in many healthcare systems, attention is being given to human resources to succeed in attaining the desired effect on improving public health [1]. Health professionals play a central and critical role in addressing the health needs of individuals, families, and communities. They are educated and trained to provide important team-based services that promote health, prevent diseases, and deliver health services. Moreover, the service involves clients in the healthcare decision-making process. Hence, collaborative efforts of health professionals contribute to improving the quality, quantity, and accessibility of health care for the population [2].

Pharmacy professionals are one key member of many types of health professionals with specific and/or multiple roles in the healthcare industry [3]. Since the pharmacy profession prologue, they have been striving to provide evidence-based medicine and caring based on the most recent interventions and technologies. They deal in both the fields of health science as well as chemistry. Particularly, they are uniquely trained in pharmaceutical discovery, development, manufacturing, compounding, packaging, quality control, health products handling, dispensing, marketing, pharmaceutical care, and others [4]. In all settings, pharmacists have different responsibilities related to medications and the health care system [3]. They provide services working in different settings such as community pharmacies, hospital pharmacies, hospital wards, the pharmaceutical industry, training of other health workers, regulatory control and drug management, academic institutes, research institutes, and others. They have been (will) efficiently contributing to the health care system. Providing

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pharmacy services is the backbone of the health system and a vital part of health services worldwide [5]. As new pharmacological entities are constantly being introduced, resistant bacteria are emerging and becoming more common, and health care delivery is changing, chemists' responsibilities are expanding significantly. Particularly, this service helps to close the gap between the potential benefit of medicines and realizing actual value. This will require a consistent and effective contribution of expertise, systems (organizations), and finance (economic growth). Pharmacists are well recognized in the healthcare system of developed countries [6], but their role is undermined and less appreciated in developing countries including Ethiopia [7]. The International Pharmaceutical Federation (FIP) has made a point of highlighting the gap between pharmacy service models and provision in developing countries and the need for this to be urgently addressed [8].

The Pharmacist - A Neglected Workforce in Ethiopia?

In many countries, pharmacists are the most accessible of all healthcare workers and as such play a key role in the delivery of healthcare services at all levels. Nonetheless, the importance of pharmacists in the healthcare sector is underestimated, particularly in developing countries. In contrast with the current worldwide professional development and sister African countries, the pharmacy profession in Ethiopia is neglected. At the national level, the current practice of pharmacy in Ethiopia is inadequate and in an early stage. However, pharmacists have a special role to play in improving public health, the quality of life for their patients, and the results of medication therapy. In the health workforce, pharmacists have a vital function to perform and a void to be filled. Physicians and nurses are frequently the exclusive focus of health provider reports, training, and professional development. Pharmacists are considered as supportive health professionals in Ethiopian health care. They tend to run under "others". Despite, the implementation of the Hospital reform guideline by the Ministry of Health in 2017 [9], the services provided by hospitals in Ethiopia are gradually improving, and the practical roles of pharmacy professionals in different spectrums of pharmaceutical services encounter significant challenges that compromise their sustainability. Such challenges arise from different sources from the health care system itself, professional commitment, and political support at the national level.

The majority of pharmacist employed at public health institutions in Ethiopia are frequently unseen and involved in

the logistics and distribution of medication supplies. Dispensing, a traditional function of pharmacists, is frequently carried out by non-pharmacists or unauthorized workers in rural and isolated parts of the nation. Additionally, pharmacists are frequently just used as information sources about the purchase and stock of medications and utilized committees of health facilities. Moreover, pharmacists are rarely represented in health facility committees and are often merely used as information sources about the procurement and stock of medicines [10]. In case they are included in the committee, they will not have the ultimate decision maker in medicine use and procurement. Surprisingly, in the private sector of the country, much of the academically acquired knowledge disappears behind business and entrepreneurial activities. A large potential, significant proportion of pharmacy knowledge and skills is wasted and remains untapped for public health and patient care.

The health care system of Ethiopia itself considers the profession and professionals as the supportive and ancillary staff at health care facilities. For example, within its national hospital services transformation guidelines, the Ethiopian Ministry of Health misquoted pharmacy service as the "last step for client services" in health facilities [9]. Therefore, the authors of this paper argue that the pharmacy services and profession in Ethiopia are already occupied by third parties such as other health workers, illegal personnel, and lay people and/or haven't gotten adequate consideration from the Ministry of Education, Ministry of Health, and other stakeholders. This is a notion indicating the minimal involvement of pharmacy professionals in health services. Moreover, different organizations, colleges, health offices including the Ministry of Health, and vacant job posts have been using the pharmacy nomenclature of degree, which is not ever in the Ethiopian Curriculum. Moreover, some of the private colleges have been providing degree awards for Bachelor of Science in Clinical Pharmacy (BSc in Clinical Pharmacy), where there is no such curriculum and nomenclature of degrees in the country (Figure 1). The current nationally recognized nomenclature of a degree at the bachelor level is Bachelor of Pharmacy (B. Pharm). This revealed that both the government and private stakeholders have no due consideration to the profession and its degree of nomenclature, which will have an impact on the professional (scope of practice) and graduate profiles of the graduates. Some of the snapshots of these posts are provided below and are accessed from the public domain/posts on websites and social media (Figure 2).

Melaku et al.: Decolonizing Pharmaceutical Services and Professionalism: Toward Equity and Inclusivity in Integrative Healthcare in Ethiopia

GAMBY Medical & Business COLLEGE	A	BOUT US 🗸	ACADEMICS 🗸 ADMI	SSION - RESEARCH	STUDENTS [™] English √
BA & BSc. Graduate					Latest News
Undergraduate	Male	Female	Total		by Category
Public Health Officer	12	5	17		Announcements News
Midwifery	3	13	16		Others Uncategorized
Nursing	34	60	94		
Medical Laboratory Sciences	42	33	75		Upcoming Events
Clinical Pharmacy	32	56	88		There are no upcoming events.
Accounting & Finance	25	40	65		
Management	19	25	44		Latest News
Total	167	232	399		Liscence Annonouncement
MBA, MSc. & MPH Graduate					Services at GAMBY GAMBY Celebrate 17th
MPH	32	13	45		Round Students' Commencement of Graduation
MBA	30	16	46		Gradition

Figure 1. Degree award for the pharmacy program, which is not in the national curriculum https://gambyteachinghospital.com/college/gamby-graduation/ accessed date March 21, 2023.

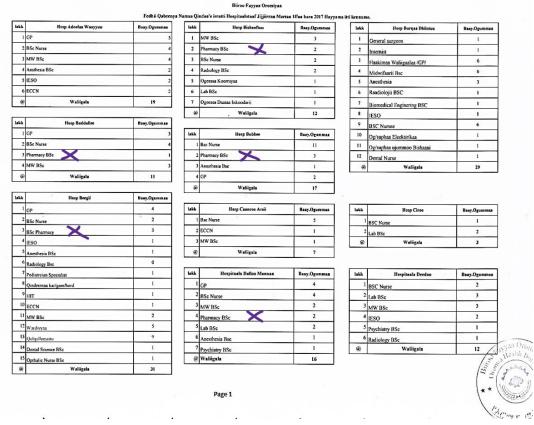


Figure 2. Pharmacy nomenclature of degree, which is not in the country's curriculum, advertised for the vacant job position (from the OHB HR Directorate telegram channel)

professional Therefore. pharmacy advancement. pharmaceutical service provision, and professionalism seen or practiced in some of the developing countries should be decolonized. Similarly, we believe that it is high time to decolonize the pharmaceutical services and professionalism in Ethiopia. If not now, when? From this perspective, we have compiled a review of available data at different service settings in Ethiopia, which suggests the need for the decolonization of pharmaceutical services and professionalism. In this review, the concept of decolonization takes different perspectives. The first one is the "decolonization of the self", which is the moral, professional commitment of pharmacists toward their profession. The second is the decolonization of knowledge and practice" of the pharmacy profession from other third parties. This will include consideration of the professional value and expertise of the pharmacists at each position based on the scope of practice in the curriculum. In addition, refraining from acts that limit the professional development and career of pharmacists and preconceived notions. Thirdly, every stakeholder of health and pharmacy professionals should give due attention to the development and also advancement of pharmaceutical services in general.

Pharmaceutical Dispensing and Compounding: The Issue of the Narrow View of the Profession

Pharmacists have a greater responsibility to ensure clients' access to medication and medication information through good dispensing practices. Accordingly, pharmacists promote the rational use of medicines and other pharmaceuticals. These pharmacy services require suitable management systems such as supply and organization, premises, regular access to affordable essential medicine, and proficiency of pharmacy professionals. Usually, ensuring access to medications can be supported by compounding practices. However, in low- and middle-income countries such as Ethiopia, access to essential medicines becomes a great challenge to apply the principles of rational drug use. Even the compounding practice has been practiced in very few hospitals and community pharmacies [11, 12]. For this, lack of appropriate compounding premises and supportive skills, limited up-to-date training, and unavailability of raw materials are the main contributors. Therefore, healthcare management and the National Pharmacy Professional Association should conduct studies and identify the barriers to pharmaceutical dispensing and compounding services.

The Ethiopian hospital reform, which was developed in 2010, is one of the main documents that provided standardized, more patient-centered services in hospitals, as well as methods to monitor the quality of care. Similarly, it was revised in 2017 for a more inclusive and detailed implementation plan [9]. However, some studies revealed that the implementation of the twelve (12) operational standards included in the pharmacy chapter of the implementation of hospital reform guidelines was found to be lower and pharmacy professionals face problems associated with motivation, and commitment to their job [13]. The

traditional role of pharmacists is to dispense and supply medicines. More recently, pharmacists have been faced with increasing healthcare demands: an ever-growing and complex range of medicines and poor adherence to prescribed medicines have forced the evolution of the pharmacist's role into a more patient-centered approach. Most often, however, pharmacists operate behind counters and in storerooms. Such traditional and narrow view the profession will affect the health outcome of the client and also pose significant challenge to the professional development to respond to the health problem of 21st century. For the evolving practices and changing needs across the world on the area of pharmaceutical sciences, it is highly desirable to have a new legislation in place related to the expanded scope of practice for pharmacists and implementing the compensation programs for pharmacists' services.

Pharmaceutical Formulation, Manufacturing, and Production

The pharmaceutical manufacturing industry is one of the major global economic forces. It relies on the discovery, development, and production of medical products. It is a vital setting in which pharmacists are an ideal contributor to research to discover and develop new medicines, manufacture medicines, and ensure their safety and quality in collaboration with other professionals [14]. These roles require advanced methods, technologies, processes, and skilled professionals which are directly associated with economic growth and the health system. The advancement of the pharmaceutical industry depends on innovation and technology which needs investing huge resources in research and development to identify, modify, and produce new entities [15]. However, in low-income countries including Ethiopia, the premises, and other conditions for designing and developing innovative, safe, effective, high-quality, and affordable medicines and health technologies are not favorable. That is why almost all drug substances and products and other raw materials in these countries are imported from developed countries. Therefore, governments and other concerned bodies should establish an intervention and act through a programmatic approach. The program should focus on promoting expansion and long-term sustainability of local pharmaceutical production, compliance with current Good Manufacturing Practices, investment, and technology transfer via working with local and international companies and developing pharmacist competency through suitable training and education. Through doing this, establishing pharmaceutical industries, and making them high-quality, efficient, and knowledge-intensive sectors is possible. Finally, international donation, overseas companies dominating the global market, the influx of sub-standard medicines into developing countries, and prevalence can be reduced [16, 17]. In this sense, local pharmaceutical enterprises lack the capacity for research and development, necessitating the implementation of prompt interventional measures through cooperation between Ethiopian pharmaceutical industries, research institutions, and academia with academia.

Administration of Pharmaceutical Services and Systems

Pharmacy professionals have a significant role in pharmaceutical administration and regulatory affairs. They are the front liner in drug/medication regulation and control, quality assurance, manufacturing facilities inspection and assessment, and drug registration [18]. They have the responsibility to contribute to protecting public health by controlling the safety, quality, and marketing of medicinal products, medical devices, and complementary medicines. Moreover, in the Ministry of Health, pharmacy professionals play a vital role in formulating health and pharmaceutical policies, pharmacopeia, and other official documents, establishing and modifying the curriculum of pharmacy education [19]. They contribute to the development, update, and enforcement of regulations, laws, and guidelines that must be followed in conducting clinical trials. Doing all these, with this specialized training, pharmacy professionals administer and coordinate the regulatory agencies, pharmaceutical industries, pharmaceutical supply agencies, and other pharmaceutical businesses. However, some of the health commodity supply agencies' leadership is occupied by non-pharmacists. Surprisingly, in settings where pharmacists have trained in the details of the pharmaceutical value chain and contribute directly, such as at pharmaceutical supply agency, they have not been the front leader in such organizations for the last ten years in Ethiopia. For example, despite the availability of experts in the central medical store of the country, the agency has been managed by nonpharmacy professionals. The post requires the appointment of a senior pharmacist with postgraduate training and qualification in the pharmaceutical supply chain to senior position for determination and implementation of national health commodities supply and drug policy. Similarly, most of the pharmaceutical sectors (such as district or zonal level pharmaceutical and pharmacy establishment regulation office), which needs pharmacy professionals as administrators/managers has not been managed by pharmacies and is preoccupied with non-pharmacy professionals. Most of them are nurses or public health in the profession. Therefore, developing experts comprehensive pharmaceutical legislation and its effective utilization of the pharmacy workforce is highly pivotal for effective and efficient healthcare delivery.

Medicines and Other Health Products Supply Chain Management

Nowadays, in both developed and low-and middle-income countries, ensuring availability and access to essential medicines and other vital health supplies is a complex process and vital for effective responses to the healthcare needs of the population [20]. Particularly, it is the key activity of pharmacy professionals at a national and regional level. The effectiveness of this service depends on the contribution of different factors such as rational selection and use, affordable prices, sustainable financing mechanisms, and reliable health and supply systems [21, 22].

In low- and middle-income countries the pharmaceutical supply chain is loaded with many challenges, often fragmented, and results in poor health outcomes. Commonly, the challenges are associated with national policies and regulations enforcement, the complexity of the administrative structure of the country, limitations in procurement, forecasting, and requisitioning at different government levels, pharmacovigilance, supply chain planning data, and limited capacity [21, 23]. To build a more flexible supply chain and promote healthcare delivery, strong leadership, and actions at a national or regional level are very important. Therefore, stakeholders should work with pharmaceutical manufacturers, distributors, regulatory bodies, and other international and national organizations. The pharmaceutical workforce needs highly competent, specialized pharmacists providing expertise in areas of focus. However, in the global primary care context the need for a professionally recognized expert cadre of pharmacy professionals in the area of medicines and other health products supply chain management with more advanced capabilities to meet patients' needs and support universal health coverage is even more pressing. Developing a career pathway for pharmacists that is structured with clear signposts for development and is adaptable to all practice settings, particularly primary care settings, is therefore essential. Such a pathway would ensure the availability of a workforce capable of meeting the increasingly complex medicines and health needs of their local communities. With this regard, pharmacy practice faces numerous bottlenecks. Lack of adequate financial allocation was a major challenge in financial resources which limited the availability of essential pharmaceuticals to provide basic service at the facility level. Moreover, the lack of transparent procurement procedures and the involvement of nonprofessionals has exposed each of the pharmaceutical value chains to corruption. Sometimes, we can see the vehicle driver working in the hospitals or the accountant easily procure and/or purchase the pharmaceutical products without notifying the responsible pharmacy services director or supply chain officer.

Pharmacy Training, Education, and Professional Development

Pharmacy, the oldest health profession, is among the most frequently considered during human resource development in many countries in the world. Yet, reports indicated that graduate pharmacists have often been underutilized [24], as they are poorly involved in the healthcare system because of skill and knowledge-related gaps. Considering this fact, many countries have moved towards advancing the traditional pharmacy training system to utilize graduates fully and effectively [25-27]. In countries like Ethiopian, the density of pharmacy professionals was also reported to be 2.38 per 100,000 population which is much lower than the World Health Organization's (WHO) standards (i.e. 1 per 2000 populations) [28], implying the need for more pharmacists who adequately trained and able to address the current challenges of the health system. Pharmacists should move from behind the counter and start serving the public by providing care instead of pills only. Consequently, a paradigm shift in pharmacy practice, which is the delivery of pharmaceutical care (focus on patient care) program was launched in 2008 by Jimma University, Ethiopia [29] by designing a curriculum that can achieve this dream of the country. However, it seems to be a hope rather than a reality as most current graduates are confined to the dispensary rather than appearing at the bedside [30]. This is because the current curriculum has lots of problems, which the graduates mentioned as poor course integration (graduates with adequate knowledge and skill), and inadequate experiential training, and it ignores the industrial sector as well. Although it is designed to be purely a clinical pharmacy curriculum, it neither addresses the clinical service nor the industrial sector, and the graduates used to call it a "vivid curriculum". This nature of the current curriculum in addition to other system-related challenges will further impair the pharmaceutical care service for which the shift was intended.

As any global nation, Ethiopiahas also undergone an epidemiologic transition in which non-communicable chronic diseases are claiming 34% of the total annual deaths [31]. There are more complex drugs coming onto the market, with an increasingly aging population with more disease conditions requiring more complex therapies along with the growth in tertiary care and hospital-based care. There is also a greater threat of litigation for inappropriate use of medicine. Much more attention has been given to the magnitude of medication-related problems, highlighting the need for skilled interventions to improve patient outcomes and safety and to improve cost-effectiveness [32]. Furthermore, there is a document recently ratified for a growth and transformation plan called National Strategy and Plan of Action for Pharmaceutical Manufacturing Development in Ethiopia (2015-2025)' to enrich local research and development of pharmaceutical companies depending on the availability of pharmaceutical scientists. All these must be dealt with to ensure the country's plan to be one of the middle-income countries by 2035 [33, 34].

If pharmacists are to contribute effectively both to the new patient-centred pharmaceutical care service and industry, we need a new direction to follow to produce skilled, knowledgeable, and need-based pharmacy professionals. Like that of Hungarian pharmacy education and practice where the curricular shift to the doctor of pharmacy (Pharm D.) ways to improve professional fees and responsibility to reward pharmacists for making high-risk clinical decisions or motivate them to keep up-to-date with drug information [32], we have to take an action and the country and its population has to be benefited by the well-trained pharmacists as their involvement could avert economical and public health losses.

The impact of clinically oriented pharmacists (PharmD graduates) on the economy, public health, and research and development of the nation was well documented [35-37], even in Ethiopia where the service is in its infancy stage. The

Pharmaceutical care needs of Ethiopians can be solved through committed and visionary Ethiopian pharmacists who can take the initiative to be actively involved in pharmacy services. To achieve this level of care and patient satisfaction, the Ethiopian pharmacy training system should fulfill the international need so that the graduates would not face problems in providing service, making risky clinical decisions, particularly in continuing their higher education and applying for jobs globally. This is the right of every developing nation; even Canadians have upgraded their Bachelor of Pharmacy program to a Pharm D for this basic reason [38, 39].

The Pharm D program is therefore a dynamic and interdisciplinary program that aims to integrate fundamental principles of pharmaceutical sciences and internal medicine to optimize patient (pharmaco-therapeutics) outcomes. This integrated understanding will help to detect early therapeutic response /failure and further GDP losses. Ethiopia unfortunately, lacks highly qualified experts in clinical pharmacy care services to accomplish the mission. To accomplish this mission and enhance the leadership and consultancy service on clinical pharmacy service and pharmaceutical care in the country and all over the world, programming and producing clinical pharmacy professionals at the Pharm D level are among the top priority priorities. Different need assessment studies within the country also indicated the importance of launching a post-baccalaureate Pharm D as it will advance the patient care and medication use process and save the gross domestic product of the country in general [40-45].

In general, we believe that there are (were) some obstacles that hinder the teamwork and cooperation of pharmacists at one or more pharmaceutical services in Ethiopia.

• Silo Effect

The pharmacist and other health workers focus only on their activities and are neither aware of nor interested in what others do.

• Stereotypes

Other health workers or managers may not be familiar with the changing role of pharmacists based on unfortunate prior experiences and unfounded rumors means that opinions are generalized to cover an entire group.

• Policies, Guidelines, or Regulations Gap

There is no (not clear) guideline indicating the scope of pharmacy practice and posing a serious impediment to pharmacy career development and job satisfaction, which has a significant impact on attrition and patient treatment outcomes.

Accusations

In the current clinical pharmacy services, ward pharmacists have the mandate to communicate the potential or actual drug

therapy problem to the multidisciplinary team (MDT). However, some individuals (maybe prescribers) will consider pharmacist interventions as "fault-finders" in his/her decision. This will create a negative atmosphere and often lead to defensive and unconstructive situations, which hinders cooperation to work as MDT in the morning session and clinical case discussions.

Commercialization of Pharmaceutical Services and Professional License

Pharmacy as a profession with commercial and therapeutic dimensions, experiences significant legal and ethical dilemmas in practice. They are exposed to financial incentives and may not be able to withstand them. Pharmacy professionals face moral conundrums that put customers' health in peril, such as hoarding, the black market, interprofessional trading, and ambiguous pharmaceutical policies. The decisions made by physicians, rules and regulations, recommendations, and marketing strategies for the pharmaceutical industry are some of the elements that have an impact on pharmacists' ethical considerations when providing pharmaceutical care. In the Ethiopian scenario, one of the major pathologies of professional practice and ethics is the commercialization of pharmaceutical services and professional licenses. The pharmacy license for retail, import, and wholesale is not adequately managed. Most of these pharmacy establishments are owned and/or managed by nonpharmacy professionals like health investors or illegal personnel who have money to procure and distribute pharmaceutical products from industries. In this establishment, pharmacy professionals may be hired with or without their license just to dispense, distribute, or procure the products. The power of money from the owner compromises the overall pharmacy practice and ethics of the profession. This might be associated with a weak/no system in place in all regions of the country for detecting false licenses, controlling canceled licenses, and the overall pharmacy practice [46].

Policy Recommendations

To develop the pharmacy profession in a way that supports care for all clients as well as professional and health care services change, its professional value must be understood to develop equitable, inclusive, and integrative health care services. Pharmacists have been a neglected healthcare workforce in Ethiopia. They must now be acknowledged, given a voice, trained, and included in patient care and the healthcare team. Pharmacists themselves ought to shift their attention from products to patients and healthcare systems. Pharmacists must take on new responsibilities that were previously thought to be outside the purview of conventional pharmacy practice. Competency and training requirements evolve along with positions. The safe and efficient provision of healthcare depends heavily on the pharmacy workforce that is not just highly qualified and competent but also driven and professionally fulfilled. This workforce also fills a vital vacuum in the health workforce.

CONCLUSION

In conclusion, the advancement of the pharmacy profession in Ethiopia is crucial for improving healthcare delivery and patient outcomes. The Ministry of Health, Ministry of Education, and other stakeholders must recognize the vital role of pharmacists and integrate them more effectively into the healthcare system. This includes revising the pharmacy curriculum to align with modern medical advancements and ensuring pharmacists are involved in decision-making processes at all levels of healthcare management. By doing so, Ethiopia can harness the full potential of its pharmacy workforce, leading to better health outcomes and a more efficient healthcare system.

Furthermore, addressing the challenges faced by pharmacists, such as inadequate professional recognition, and limited career development opportunities, is essential. Stakeholders should work towards creating a supportive environment that fosters professional growth and ethical practice. By prioritizing the decolonization of pharmaceutical services and professionalism, Ethiopia can build a more equitable and inclusive healthcare system that fully utilizes the expertise of pharmacists to benefit public health.

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