

## Medical Use of Cannabis in Africa: The Pharmacists' Perspective

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### Abstract

*Cannabis is indigenous to many African countries. Despite this, the legalization of cannabis for industrial, medical, and economic purposes is not uniform. However, there is a growing interest in cannabis use for medical purposes in Africa. Pharmacists are best equipped to provide clinical advice and oversight in the safe management, production, and dispensing of medical cannabis on the continent. In this article, we share our perception as pharmacists regarding the medical use of cannabis and the possible roles of pharmacists in maximizing its use in Africa.*

**Keywords:** Pharmacists, Cannabis, Marijuana, Roles, Africa

### Introduction

Marijuana (cannabis) contains more than 450 active constituents and over 60 exclusive cannabinoids.<sup>1</sup> The legal reform inclosing marijuana is astoundingly multifaceted and unsettled. The major active chemical constituent in marijuana is  $\delta$ -9-tetrahydrocannabinol ( $\Delta^9$ THC), which is principally responsible for its therapeutic and psychoactive effects.<sup>2</sup> It also contains cannabinoid, which purely has only medicinal purposes with zero effect on mind and behavior.<sup>3</sup> The medicinal benefits of cannabis cannot be underrated. This ranges from its potential use in managing Parkinson's diseases, opioid addiction, sleep problems, multiple sclerosis, epilepsy, Tourette Syndrome, acute and chronic pains to gastrointestinal disorders, among other conditions.<sup>4</sup> However, the available clinical trial data suggest that many purported indications of cannabis and cannabinoids are not evidenced by good clinical data.<sup>5</sup> Clinicians worldwide are also worried about the addiction potential and other adverse effects that cannabis can cause.<sup>5</sup> Despite this, FDA has approved one cannabis-derived (Epidiolex) and three cannabis-related drug products (Marinol, Cesamet, and Syndros) for use in the United States and there is also a growing interest on cannabis use for medical purposes in Africa.<sup>6</sup>

Medicinal cannabis has also been proven to have greater efficacy in some disease conditions than the present medicinal agents use in their management and has been suggested as an alternative therapy for these diseases.<sup>4</sup> Although most countries around the world, including some African countries, have a restriction on the recreational and medicinal use of cannabis.<sup>6</sup> There are emergent facts on the safety and efficacy of medicinal cannabis in pharmacotherapy. With the increasing

role of pharmacists in public health<sup>7,8</sup>, the roles of pharmacists in the successful use and access to medical marijuana is therefore important.

In this commentary, we share our perception as pharmacists regarding the medical use of cannabis and possible roles of pharmacists in maximizing its use in Africa.

### Main Body

Even though cannabis is commonly used in many African nations as a recreational drug illegally, the potential medicinal use is often neglected and generally perceived that legalizing it can normalize aggressive recreational use. Pharmacists in African nations need to know the legal structure surrounding medical marijuana for them to serve their patients better at the heart of health promotion without contravening the law. Arguments continue to arise on the need for removal of cannabis from schedule I of the controlled substances act. The most tightly restricted category reserved for drugs with 'no currently accepted medicinal use'. The current scheduling of cannabis is as strict as that of heroin. This has inevitably restricted progress on research for the potential therapies derived from this drug use.<sup>9</sup> There has been progress in cannabis use legislation in some African countries for medicinal use.<sup>10</sup> **Table 1** revealed the African countries that legalize cannabis and the status of use.

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**Table 1:** African countries that legalize cannabis and the status of use

African country	Status of use
Malawi	Legalized officially for industrial use, medical use, growing, selling, and exporting of cannabis. Recreational use is prohibited.
Zambia	Legalized officially for export and medicinal purposes. Recreational use is prohibited.
South Africa	Medical and recreational use of cannabis are legal (officially).
Zimbabwe	Legalized officially for medical use and not recreational use.
Lesotho	Legalized officially for medical use, growing, selling, and exporting of cannabis. Recreational use is prohibited.
Ghana	Prohibited for recreational use but legal for medical and industrial purposes.
Morocco	Prohibited for recreational use but legal for medical and industrial purposes (unofficial yet).
Rwanda	Legalized medical cannabis for export and medical use
Uganda	Legalized solely for exports.

The World Health Organization (WHO) has recently proposed the rescheduling of cannabis within international laws, considering the past and present evidence for medical application of cannabis hereby reversing its position as to restrict the use of the drug in legitimate medical practices.<sup>11</sup> This proposition in some developed countries has received warm reception.<sup>12</sup> However, African countries can only foster the adoption of WHO's reschedule proposition by increasing the participation of medical practitioners and legal drug experts i.e., pharmacists in the law making and amendment process. Some African countries are plagued with ineffective policies and implementation processes.<sup>13</sup> This occurrence can only be salvaged by the active and consistent participation of experts in policy making and implementation processes.

Marijuana is prohibited under federal law in many countries, and health authorities has no role in the production, prescription, dispensing, labeling, or purity assessment of the final product.<sup>14</sup> This implies that patient can only purchase or possess marijuana from unauthorized sources, which raises additional concern about the product's safety and possibility of pervasive abuse.<sup>14</sup> With increasing media awareness on the potential benefits of cannabis in pharmacotherapy, it is only a matter of time before patients start seeking illegal means to access and use cannabis for their medical concerns. Increasing awareness will in the long run increase threat posed by cannabis use to public health in Africa. Cases of adverse effect,

abuse potential will increase with increasing number of patients missing out on proper counselling and advice from a healthcare professional. It therefore becomes imperative to assess the emerging roles of pharmacists in successful use of cannabis in pharmacotherapy in Africa.

Pharmacists in the African countries need to be aware of the increasing trend towards growing public recognition of medical cannabis as a pharmacotherapy option. Pharmacists can engage the patient in thorough medical and social histories and inquire about the use of illicit drug, including medical/recreational use of marijuana. Pharmacists should take up the active role to provide adequate unbiased information on the benefits and risks of cannabis use.<sup>15</sup> This is important because the health-seeking behavior of many patients make for self-medication and the possibilities of coming across the information on potential roles of medicinal cannabis in their ailment and this can facilitate abuse. Pharmacists need to have a broad knowledge of the risks and benefits of medical marijuana and take the active role in health promotion and enlightenment of the general public.<sup>16</sup> In **Table 2**, we highlighted the possible roles pharmacists across various sector in Africa can play in medicinal use of cannabis. However, until there is policy reform towards legalizing medical cannabis, pharmacists may not routinely advocate marijuana use or assist patients in obtaining the drug but should provide honest information on its risks and benefits to the patient.

**Table 2:** Possible roles of African pharmacists in medicinal cannabis use.

S/N	Sector of pharmacy practice	Role
1.	Hospital	Pharmacists as custodians of medications with roles in medication regulation, dispensing, counseling, health promotion, identifying possible pharmacotherapy interactions, pharmacovigilance, research and seeking for more evidence that will warrant the accessibility and availability of medical cannabis to those who genuinely needs it cannot be overemphasized. The dispensing of medical cannabis in hospitals and should be done under close supervision of a registered pharmacist.
2.	Industrial	Industrial pharmacists can play active roles in local production of medical cannabis. The supply chain of cannabis can also be monitored, regulated, and designed, by pharmacists with collaborations from other healthcare stakeholders to avoid unintended access and ensure transparent supply.
3.	Community	Like hospital pharmacists, community pharmacists have roles in medication regulation, dispensing, counseling, health promotion, identifying possible drug interactions, pharmacovigilance, and research towards its ultimate successful and safe use. The dispensing of medical cannabis in community pharmacies should be done under close supervision of a registered pharmacist.
4.	Regulatory	Safeguarding the quality, safety, and efficacy of marijuana in public and private spaces can be achieved by regulatory pharmacy bodies. This will include review of laws surrounding compounding, prescription, dispensing, dosage, storage, and record keeping.
5.	Academia	From review of curriculum in pharmacy schools to inclusive research on emerging prospects of cannabis in pharmacotherapy is essential. Review of curriculum will be with the aim of teaching laws and application of cannabis in different spheres of pharmacy practice.

Research is also important to better aid the understanding of how integrating medicinal cannabis can be more useful to the healthcare systems and the overall need of the patients.<sup>17,18</sup> The research interest of drug policy researchers in African countries need to shift in order to bridge the knowledge gaps in the opportunities, benefits and risks associated with medicinal cannabis. Cannabis plant is indigenous to many African countries and it is interesting to note that vast majority of research in this field are not carried out by researchers in Africa. This is to be seen as an opportunity for pharmacists in academia to venture into this field because there are still many unanswered questions on cannabis use and the knowledge gaps need to be bridged. Even though cannabis is a drug of abuse, the fact that it is a potential pharmacotherapy agent cannot be overemphasized and pharmacists, together with other stakeholders', in Africa need to take the ownership to safeguard the health of the populace at the large interest of public health.<sup>19</sup>

Currently, there is a lack of knowledge on the perception, attitude and beliefs of healthcare professionals including pharmacists on the use of medical cannabis in Africa. To the best of our knowledge, there are no published articles in any of the African countries on this topic. However, in a systematic

review which included 26 studies, with no reference from developing countries, it was revealed that health professionals concur with the use of medicinal cannabis, notwithstanding, there was a common dearth of self-perceived professional knowledge about the entire characteristics of medicinal cannabis.<sup>20</sup> Thus, it becomes imperative to consider the emerging roles of cannabis in pharmacotherapy and the roles of pharmacists in its successful application from legalization down to use in pharmacotherapy.<sup>21</sup>

In conclusion, despite the fact that cannabis use and cultivation are illegal in most of the developing countries<sup>22,23,24</sup>, it is still one of the most abuse drugs in this region. It is essential to pursue restriction lifting to allow the use of cannabis for medical purposes and empower the pharmacists on their roles in maximizing therapeutic outcomes in patient who actually needs the drug. This will not just contribute to the revenue of the developing countries but ensure maximization of the potential health benefits of cannabis. However, there is a need to bridge the knowledge gaps of healthcare professionals including the pharmacists on the potential use and dispensing practice of medical cannabis<sup>25</sup> in Africa. In addition, further research should be implemented on the knowledge, attitude, awareness of role, perception, and beliefs of pharmacists and other healthcare professionals in Africa as regards cannabis

use. This will provide the necessary information to support for tailor-made policies aimed at pharmacy school curriculum review and training of pharmacists in Africa on ethical issues and uses of the medical cannabis in order to balance the real potential of cannabis with their limitations and adverse effects.

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The opinions expressed in this paper are those of the author(s).

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