

**DR. HARLEY MOSELEY MB.BS, (UWI) FAAPMR**  
**Consultant Physical Medicine & Rehabilitation Specialist**  
**Associate Lecturer, School of Clinical Medicine & Research, University of the West Indies**

“PENRITH”  
11<sup>TH</sup> Avenue Belleville  
St. Michael, Barbados, W.I.

TEL: (246) 426-5452  
FAX: (246) 429-6243  
Email: hslm3@hotmail.com

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September 20<sup>th</sup>, 2019

The Chairman  
Joint Select Committee of the Barbados Parliament  
Parliament,  
Parliament Buildings  
Bridgetown, Barbados, W.I

Dear Sir/Madam,

**Re: Joint Select Committee on the Medicinal Cannabis Industry Bill (MCIB), 2019**

I have been invited to submit a written opinion to the Committee with regards to my opinion(s) and concerns that have arisen after thoroughly perusing a written copy of the MCIB. My opinions are based upon my training and experiences as a qualified physician for over 20 years and a fully qualified specialist in Rehabilitation Medicine for over ten years.

**Appropriate use of terminology**

I am concerned that in reading the Bill there appears to be inaccurate use of the term “addiction” throughout the document. The term “addiction” is no longer considered appropriate in medical literature as it lacks precision. In 2015 it was replaced by the term “Substance Use Disorder” by the American Psychiatric Association in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)

It is important to clarify the correct medical definitions for the MCIB.

**Regulation by the proposed Barbados Medicinal Cannabis authority**

With reference to Part II, 3 & 4.

The degree of proposed regulation (e.g. electronic tracking and database) is incongruent with the actual risk of development of Cannabis Substance Use Disorder.

Cannabis Use Disorder can take the form of addiction in severe cases. However, estimates suggest that only 9% of people who use cannabis will become dependent on it, with an increased risk of about 17% in those who start using in their teens. This is in contrast with 35% of people using far less regulated opiates developing a Substance Use Disorder.

## **Safety of Medicinal Cannabis**

There is an underlying assumption in the MCIB that Cannabis is a very dangerous drug. Nearly all therapeutic medicines may have toxic, potentially lethal effects, yet there is no record in the extensive medical literature describing any cannabis-induced fatality. Cannabis is used daily by enormous numbers of people throughout the world and its use endemic in our Caribbean region. It is utilized illegally and most commonly without the benefit of direct medical supervision. By contrast aspirin and paracetamol commonly used, 'over-the-counter' medicines, cause hundreds of deaths each year.

### **Determination of Cannabis toxicity**

Drugs used in medicine were formerly given an LD<sub>50</sub> rating. This refers to the amount of substance required to kill 50% of the test population. The higher the LD<sub>50</sub>, the safer the drug. It is estimated that cannabis's LD<sub>50</sub> is around 1:20,000 or 1:40,000. By contrast, the LD<sub>50</sub> for Aspirin is 1:199, and for Caffeine it is 1:50. Therefore, it is unlikely for cannabis to induce a lethal response as a result of drug-related toxicity.

Another medical term that describes drug safety is called the therapeutic ratio. This ratio defines the difference between a therapeutically effective dose and a dose which is capable of inducing adverse effects. The higher the therapeutic ratio, the safer the drug.

Paracetamol has a therapeutic ratio of ~1:8; aspirin has a therapeutic ratio of ~1:20. The therapeutic ratio for prescribed drugs is commonly around 1:10 or lower. Cannabis's therapeutic ratio, like its LD<sub>50</sub>, is impossible to quantify because it is so high.

## **Cannabis inaccurate representation in the MCIB as a dangerous drug**

The myth of cannabis being a "dangerous drug" has been perpetuated throughout the language of this Bill. Cannabis substance abuse disorder is not common. Cannabis like any other pharmaceutical substance has its risks of adverse effects, however, its clinical usefulness can no longer be denied. Further investigations and scientific research into medicinal uses for cannabis are warranted to ensure that we do not "throw out the baby with the bath water".

## **Inadequate representation of key stakeholders on proposed board**

With reference to First Schedule, Section 2 (a) and (b), the range of disciplines, that the Minister is to select the proposed Board from should be expanded to include Nursing and Psychology.

The primary role of Nursing is patient care, advocacy and education. In addition, psychologists are important in the assessment, diagnosis and treatment of mental health and behavioral disorders that may be associated with Cannabis Substance Use disorder.

Board representatives must reflect the spectrum of society that can be directly affected. A wide selection of technical advisors will give the Minister information that will more accurately reflect the societal needs and concerns.

## **Potential to encourage the illicit cannabis market**

There is a constant risk of increasing the lucrative yield of any illegal cannabis markets. In the Bill there are some factors that might inadvertently encourage the growth of the illegal possession and sale of medicinal cannabis.

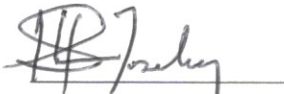
- Failure to consider the established societal use and easy available locally grown marijuana.
- 3-year non- renewable licenses
  - The Bill is not clear as to why this specific time period (why not 5, 7 or 10 years) and what are the aims in doing this. It is likely that restricting these licenses to an elite number of persons is indirectly going to encourage a growth in the illicit market where the 'unselected' will continue to ply their trade.
- There are harsh punitive measures outlined, these have not deterred anyone in the past and are unlikely to do so in the future. It might be more prudent to offer some form of 'amnesty' so that more of the current persons in the illegal market can be registered and later regulated and taxed.

### **Are the pharmacists only to dispense prescribed medicinal cannabis?**

I suggest that a revised Bill must allow the local licensed pharmacists to 'compound' various cannabis formulations. Currently cannabis cultivation is common in our country and various 'backyard' formulations are cheap and readily available. They are going to be far cheaper than any imported cannabis-based medications. This is also one of the factors that confounded the Opioid Epidemic in the USA. Cheap heroin was readily available at the local street corner and it was far more economical to obtain than to pay for the doctor's visit and the subsequent purchase of prescribed medication through the pharmacy. There is also a growing mistrust of some patients about manufactured pharmaceuticals and their side effects. Some of the patients in my practice are openly demanding more 'natural' medicines or as few medications as possible to treat their conditions.

I hope that this written presentation can suffice, I am available for further discussion.

Regards,



H. Moseley III MB, BS (UWI), FAAPMR  
Associate Lecturer, UWI (Cave Hill Campus)

### References

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