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Feb 22, 2021

Committee on Federal and State Affairs
24 February, 2021; Room 346-S—Statehouse

RE: HB 2184

Chairman Barker and committee members:

Thank you for the opportunity to provide the Committee with my testimony supporting medical cannabis for Kansas.

I am a Clinical Professor at the University of Colorado School of Medicine. I recently retired after 23 years as the Distinguished Professor of Alcohol and Drug Abuse Research at UT Southwestern Medical Center and over 30 years as an addiction psychiatrist in the Department of Veterans Affairs. I have published and spoken widely on the biological effects and treatment of addictive disorders (1) and I am the Editor of *The American Journal of Drug and Alcohol Abuse* (2). My research has been funded by the National Institute on Drug Abuse (NIDA), the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the Department of Veterans Affairs.

Marijuana, or "botanical cannabis," has several known cannabinoids that are potentially useful in a number of additional debilitating conditions. In a recent report, the National Academies of Medicine, Engineering, and Sciences reported that there was *conclusive or substantial evidence* that cannabis or cannabinoids are effective for the treatment of chronic pain in adults and multiple sclerosis spasticity (3). *JAMA Internal Medicine* reported that states with medical marijuana laws saw a 25% decrease in opioid overdose deaths compared to states that did not have medical marijuana (4). This observation has been confirmed by other investigators. In states with medical cannabis, studies also show a decrease in Medicaid (5) and Medicare Part D (6) prescriptions for opioids and psychoactive drugs. A review in the *New England Journal of Medicine* by the director of NIDA states "clinical conditions with symptoms that may be relieved by treatment with marijuana or other cannabinoids" include chronic pain, inflammation, multiple sclerosis, AIDS-associated anorexia and wasting syndrome, glaucoma, and nausea (7). It is estimated there are now more than 1.2 million legal medical marijuana patients, and patient

surveys consistently find that over half report using marijuana to reduce reliance on prescription drugs, primarily opioids (8).

From a pharmaceutical perspective, botanical cannabis is a very safe drug. In the U.S., tobacco kills almost 500,000 people last year, alcohol almost 90,000 (9,10). The opioid epidemic was responsible for over 70,000 overdose deaths in 2017 and 700,000 since the onset of the epidemic (11). In contrast, to my knowledge, even though medical cannabis was first legalized 23 years ago and the full plant is now legal in 36 states and the District of Columbia, nobody has ever died from a marijuana overdose. Although there were concerns that adolescent use would increase if medical cannabis was legalized, multiple studies have confirmed that adolescent use of cannabis does not increase in states with medical cannabis compared to other states (12). In fact, a recent study in the *American Journal of Drug and Alcohol Abuse* found that the number of teenage cannabis smokers was one percent *less* in states that had enacted medical marijuana laws compared to those that had not, even after accounting for other important variables such as tobacco and alcohol policies, economic trends, youth characteristics and state demographics (13).

The legislative process is an admittedly unusual pathway for providing legal access to a medication. This approach is often cautioned against while we await the findings from additional research. The exploration of cannabis therapeutics is, indeed, a very exciting area of investigation and many pharmaceuticals that utilize the human body's cannabinoid receptors are in development. However, the pathway to FDA approval is a long and arduous process; it will likely be at least a decade before many of these compounds are available for use. And despite the clarion call for "more research," very little research in the U.S. is being funded in cannabis therapeutics; furthermore, this research is notoriously difficult to conduct due to government restrictions. Meanwhile, there is an *urgent need* to increase the availability of botanical cannabis for those presently suffering. Although I myself was initially skeptical of many of the claims of medical cannabis advocates, I can no longer ignore the hundreds of personal and heart-felt testimonies of changed lives, not possible with present pharmaceuticals, that I have heard over the past several years. I hope that you are similarly touched.

It is important that the ability of patients to obtain a potentially life-saving drug is not further delayed. I urge your support of the use of medical cannabis in Kansas.

Sincerely,

Bryon Adinoff, M.D.
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Adinoff Addiction Psychiatry, PLLC
Editor-in-Chief, *American Journal of Drug and Alcohol Abuse* *(AJDAA)*
Distinguished Professor of Alcohol and Drug Abuse Research, University of Texas Southwestern Medical Center (retired)

1. Adinoff publications
2. The American Journal of Drug and Alcohol Abuse
3. Committee on the Health Effects of Marijuana: An Evidence Review and Research Agenda (2017) *The health effects of cannabis and cannabinoids: a report from the National Academies of Sciences, Engineering and Medicine*. The National Academies Press: Washington, D.C.
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