The Marijuana Phenomenon—Contractions and Silence.pdf

Joanne M Hall
Mona Shattell, PhD, RN, FAAN
Elizabeth McConnell, DePaul University

Available at: https://works.bepress.com/mona_shattell/103/
The Marijuana Phenomenon

Contradictions and Silence

Joanne M. Hall, PhD, RN, FAAN & Mona M. Shattell, PhD, RN, FAAN & Elizabeth A. McConnell, MA

Abstract
The United States is trending toward more permissiveness regarding recreational and medicinal marijuana (MJ). Many conditions for which MJ is recommended, prescribed, or self-prescribed are symptoms that advanced practice nurses address daily. Yet, the silence of nursing scientists on ethics, practices, and policies regarding such clinical decisions is deafening. This is but one of many contradictions about MJ use that we discuss in this article. We do not propose to resolve these contradictions; that is left to the community of nurse scientists in interprofessional discourse. Collectively, we must explore these contradictions and, through evidence-based policy recommendations, overcome the silence about how providers view MJ, how it might be helpful, its risks, and cultural shifts that have accompanied a changed political/legal environment. Long term, we must close the gaps in the nursing knowledge base regarding MJ as it affects users and how it is used interventionally. 

Keywords: cannabis, legal issues, medical marijuana, nursing education, public policy

The efficacy of MJ stems from the fact that the body produces endocannabinoids, and MJ mimics these. How each of these physiological effects (Baron, 2015). This is a moving and multiplicative target as new strains of MJ are being developed and approved for clinical use daily. Yet, the silence of nursing scientists on ethical, practical, and policy-related dilemmas embedded in these clinical decisions is deafening. This is but one of many contradictions about MJ use that we will discuss in this article. Our purpose is not to resolve these contradictions because that is a task of practitioners and nurse scientists in interprofessional discourse with others. Nor can we hope to review the literature comprehensively on the MJ phenomenon. We can only raise more questions and make suggestions. Collectively, as nurse scientists, we can explore the contradictions and, through policy recommendations, overcome the silence among many healthcare providers about phenomena related to MJ in their clinical contexts.

Although legislative changes regarding marijuana (MJ) have lately been sweeping the nation, the United States remains a patchwork quilt of differing laws and policies. Increasingly, U.S. states have either legalized the full gamut of medical and recreational uses of MJ (five states; Harkinson, 2014), adopted medical uses of MJ (30 states; Harkinson, 2014), or decriminalized the possession of small amounts of MJ (21 states; Harkinson, 2014). Medical MJ is used to control pain and nausea, increase appetite, minimize anxiety, control anger and impulsive behavior, and control seizures in children (Johannigman & Eschiti, 2013; Rollins, 2014). The use in controlling seizures is a context that seems to have evoked sympathetic public response and fosters a new look at cannabis because the narratives of benefit for children are indeed powerful.

Many of the conditions for which MJ is used, either formally, informally, or self-prescribed, involve symptoms that advanced practice nurses (APNs) encounter daily. Yet, the silence of nursing scientists on ethical, practical, and policy-related dilemmas embedded in these clinical decisions is deafening. This is but one of many contradictions about MJ use that we will discuss in this article. Our purpose is not to resolve these contradictions because that is a task of practitioners and nurse scientists in interprofessional discourse with others. Nor can we hope to review the literature comprehensively on the MJ phenomenon. We can only raise more questions and make suggestions. Collectively, as nurse scientists, we can explore the contradictions and, through policy recommendations, overcome the silence among many health care providers about phenomena related to MJ in their clinical contexts.

APPARENT CONTRADICTIONS
MJ, also known as cannabis sativa, goes by dozens of other terms familiar to those working in the substance misuse field, including weed, pot, herb, and even simply, “dope.” Unlike most pharmaceutical agents, MJ has not come through the usual routes of pharmacological development. Although it has been used for thousands of years in many cultures (Priorreschi & Babin, 1993), science is still scratching the surface in determining all of the substrate ingredients and their physiological effects (Baron, 2015). This is a moving and multiplicative target as new strains of MJ are being developed constantly. A search of PubMed with title terms of “marijuana” or “cannabis” yields nearly 8000 results, which is significant. Furthermore, currently, the literature is burgeoning as the legal status of MJ changes, and more therapeutic uses are being proposed and tested.

WHAT IS MJ AND WHAT CAN IT DO?
The efficacy of MJ stems from the fact that the body produces endocannabinoids, and MJ mimics these. How each of these
types of endocannabinoids acts physiologically is not adequately scientifically established; however, currently, MJ is widely used as medication. MJ is a complex botanical; it is not a single substance. Furthermore, although traditionally, delta-(9)-tetrahydrocannabinol (THC) was the sole focus and long considered as the only active ingredient. It is a psychoactive substance thought to account for the more widely known perceptual and somatic sensations reported by recreational users. Unsurprisingly, THC is also thought to be responsible for the efficacy in symptom relief in most contexts for which it has, until recently, typically been prescribed. More research is needed to clarify the roles of various endocannabinoids and cannabinoids in the body.

Cannabidiol, the other main subcomponent, is not considered psychoactive and does not produce a “high,” and this substance holds much promise for addressing not only symptoms but also causes of diseases, such as epilepsy (Baron, 2015; de Mello Schier et al., 2014; Szaflarski & Bebin, 2014). Strains of medical MJ have been developed that are relatively low in THC and high in cannabidiol, which may make MJ more useful and accepted as medicinal. As more of MJ ingredients are isolated, each having differing properties and effects, the potential grows for matching hybrid strains with varying amounts of specific cannabinoids to address health problems in a safer, more targeted way.

WHAT IS NURSING’S POSITION?

Nursing researchers have generally avoided establishing (or not) the use of MJ as an intervention for relieving symptoms and resolving health problems. Nursing educators are likely still confining education about MJ to content that defines its use as substance abuse, although recent efforts have been made to increase education about medical MJ within the field (Phillipsen, Butler, Simon–Waterman, & Artis, 2014; Scribner, 2014). In 2008, the American Nurses Association released a position paper officially supporting patients’ safe access to medical MJ (American Nurses Association, 2008). Little action followed in terms of knowledge development on MJ. Yet, anecdotally, APNs in many specialties covertly and either explicitly or implicitly sanction patients trying or continuing to use MJ when they find it provides relief in a myriad of physical and mental conditions and quality-of-life issues. Nurses are thus taking risks depending on the degree of legalization or decriminalization of MJ in their location. Practicing nurses are well aware of the legal contradictions. Only recently has funding for research showing positive uses of MJ begun to appear in the literature (Belendiuk, Baldini, & Bonn-Miller, 2015; Burns, 2013; Calabria, Degenhardt, Hall, & Lynskey, 2010; Gates, Albertella, & Copeland, 2015; Gibbs et al., 2015; Quickfall & Crockford, 2006; Vukadinovic, Herman, & Rosenzweig, 2013; Wrege et al., 2014). Generally speaking, nursing academics seem hesitant to step into controversial situations and instead adopt a “wait and see” attitude. A contradiction this illuminates is that many APNs are primary care providers, often those engaged in precisely the kind of symptom management MJ research may facilitate.

Despite legalization and medicalization, there are still deep concerns about MJ as medicinal based on fairly long lines of problem-focused research, such as on psychosis, lung problems from smoking it, comorbid smoking and alcohol use, effects on children and adolescents, and so forth (Barrowclough, Gregg, Lobban, Bucci, & Emsley, 2015; Becker, Collins, & Luciana, 2014; Brook, Lee, Rubenstone, Brook, & Finch, 2014; Fergusson, Horwood, & Beautrais, 2003; Fiellin, Tetrault, Becker, Fiellin, & Hoff, 2013). Moreover, clinical results undoubtedly vary with dose effects; frequency, duration, and amount of use; physiological age; developmental characteristics; neurocognitive capacities; mode of use; and other drugs, legal and illegal, used concurrently (Banes, Stephens, Blevins, Walker, & Roffman, 2014; Battistella et al., 2014; Compton, Saha, Conway, & Grant, 2009; Fergusson et al., 2003; Richmond et al., 2015; Sagar et al., 2015; Terry-McElrath, O’Malley, & Johnston, 2014; Thames, Arbid, & Sayegh, 2014).

Legality is a serious problem. Nurses advocating for and working with patient populations who use MJ medicinally may themselves be suspected of substance use or misuse (depending on the legal status of MJ in that locale), in contradiction to the professional standards in many nurse practice acts. Silence typically surrounds what is illegal or illicit. Furthermore, silence surrounds the unknown and uncertain. So, in nursing education, there is an opportunity to break silence
with content about MJ, specifically addressing the many facets of its use and the culture change that is occurring today, to avoid leaving future nurses in the same, familiar quandary. Dialogue is needed regarding the varied perspectives on treatment goals and methods concerning MJ, including whether to treat MJ recreational use as misuse. Nursing professionals are not immune to societal stigma and may have stringent, “black and white” moralistic stances and attitudes toward substance use and misuse, without weighing the risks and effects of one drug in contrast to another. For instance, the most damaging drugs in terms of lethality, addiction, and impairment are legal: alcohol and prescription opiates. Where available, and not, many patients specifically prefer to use MJ instead of the highly problematic opiate analogues (Bostwick, 2014a, 2014b; Zaller, Topletz, Frater, Yates, & Lally, 2015).

What of nurses and other health professionals who use MJ? Strict and surveillance disciplinary measures have been applied to health professionals who have substance misuse problems and often have led to board involvement. Anecdotes, especially from those who have been through such proceedings, suggest that, in some cases, health-related boards have viewed impaired professionals as criminals versus as patients, although this is changing (Baldissari, 2007). What should be the stance in states where nurses, as citizens, can purchase and use MJ on their own time? Will this mean a lifting of the disciplinary policies governing nurses’ use of MJ, or will it remain a de facto “illicit substance?” Questions are also emerging in locales where medical use is licit concerning whether and how one can take MJ medicinally and how this might affect safety in the workplace (Goldsmith et al., 2015; Phillips et al., 2015; Price, 2014).

IS NURSING WEAK ON MJ ADVOCACY?

Nurses have not professionally engaged in vigorous activism around MJ legalization for medical and recreational use (Bostwick, 2012, 2014b). Some of the activism concerning the legalization of MJ has included participation of parents of desperately ill children and other patients who oppose laws that keep them from access to a potentially medically useful substance (Lucas, 2010). Others advocate for decriminalization because of the judicial system’s pattern of convicting and/or giving excessively long sentences to persons merely possessing MJ and because of judicial bias in applying heavier sentences and more frequent incarceration for persons of color, especially young Black men (Wegman, 2014). These are but a few critiques of the fallout caused by the failed “War on Drugs,” which is often characterized as a war on poor people (Western, 2010).

Nursing, as a discipline, however, has historically been weak or late regarding activism. The profession was locked into subservient positions for centuries; subtler forms of subjugation, often based on gender, continue. Nursing leadership has become much stronger in recent years, yet this has often not extended into activism on controversial topics until they are nearly “mainstream” issues. Arguably, MJ has become mainstream already, as it is now locked into the U.S. economy as a commodity, pharmaceutical, and source of profit and tax revenue (Cavazos-Rehg et al., 2015; Gettmann & Kennedy, 2014; Palali & van Ours, 2014; Reuter, 2014; Vanhove, Surmont, Van Damme, & De Ruyver, 2014; Vanhove, Van Damme, & Meert, 2011). Unmistakably, there is reticence where the science is not yet conclusive regarding MJ risks, components, and effects and what social outcomes might result from widespread use. Problematically in this instance, nursing leaders often display a reluctance to introduce debate/conflict. Opinions will vary, and some division on these issues within the nursing discipline might not be counterproductive. MJ issues could precipitate specific division between clinical nursing and academic research nursing. In other words, pragmatic prescription by clinicians might be frowned upon because nursing clinical trials are not available, and clinicians might blame academics for leaving them in this quandary, content to study less stigmatized topics.

WHAT DO WE KNOW ABOUT MJ?

Although rigorous research on its efficacy is lacking because of limited political and funding support for research on medical MJ (Bostwick, 2012), MJ has been used to treat a number of health conditions. For palliative care oncology patients, MJ may increase appetite, decrease nausea and vomiting, and control pain symptoms (Johannigman & Eschiti, 2013). MJ has also been used to treat glaucoma, symptoms of multiple sclerosis, and neuropathic pain and has been efficacious for appetite stimulation in persons living with HIV experiencing anorexia–cachexia syndrome (Giacoppo, Mandolino, Galuppo, Bramanti, & Mazzon, 2014; Grant, Atkinson, Gouaux, & Wilsey, 2012). Regarding children, MJ has been used to treat epilepsy, autism, cancer, and attention-deficit hyperactivity disorder (Rollins, 2014). In addition to these current uses, MJ has a number of promising pharmaceutical applications, and the development of newer forms and synthetic pharmacological products may reduce demand for botanical cannabis (Bostwick, 2012).

Literature on potential negative health impacts of MJ use is also limited and, as would be expected in older studies, often does not differentiate between medical and recreational uses. There are also methodological issues (such as lack of adjustment for tobacco smoking and small sample size) limiting the generalizability of existing research (Gordon, Conley, & Gordon, 2013). Pulmonary disease is a major potential negative health impact, and MJ smoking has been linked with symptoms of bronchitis, large airway inflammation, bronchodilation, and increased cough and mucus production (Bostwick, 2012; Gordon et al., 2013; Hall & Degenhardt, 2009; Lee & Hancox, 2011; Lutchmansingh, Pawar, & Savic, 2014; Tashkin, 2005). MJ has been associated with decreased immune cell activity, leading researchers to suggest that it may leave users with increased susceptibility to infections (Gordon et al., 2013). MJ users have also shown increased rates of oral cavity diseases and disorders, such as gum inflammation and oral dryness, and acute increases in heart rate and palpitations (Gordon et al., 2013).

Copyright © 2016 International Nurses Society on Addictions. Unauthorized reproduction of this article is prohibited.
In addition to potential adverse physical health effects, some have expressed concern about the impact of MJ use on cognitive functioning, mental health, and psychosocial development. Studies have been made of possible negative social consequences for children of parents who use MJ (Mason, Hanson, Fleming, Ringle, & Haggerty, 2015; Vermeulen-Smit, Verdurmen, Engels, & Vollebergh, 2015). Although there is some evidence that long-term chronic use may be associated with mild cognitive impairment, evidence for the impact of MJ use on memory, attention, and other central nervous system functioning is inconclusive, specifically about whether these effects exist, how strong they are, and whether they are attributable to acute or chronic effects of MJ use (Gordon et al., 2013; Hall & Degenhardt, 2009; Harvard University, 2010).

Among adolescents, heavy use has been linked to decreased educational attainment, and researchers have expressed concern that such use may adversely impact adolescents’ psychosocial development and mental health (Amerman, 2014; Hall & Degenhardt, 2009). MJ is often proposed as a “gateway drug,” leading users to experiment with “hard” drugs such as cocaine, but research is inconclusive about these concerns (Harvard University, 2010), and full legalization ostensibly breaks the link with the literature. This should accomplish a social separation in the cocaine and heroin trade from legal purchasing of a legal substance, MJ. Finally, there is some evidence that MJ use can increase psychotic symptoms among those with emergent psychosis and/or schizophrenia, that it may induce mania or rapid cycling in those with mood disorders, and that acute symptoms may include increased anxiety or panic attacks among some users (Hall & Degenhardt, 2009; Harvard University, 2010; Radhakrishnan, Wilkinson, & D’Souza, 2014). Mortality attributable solely to MJ use is absent in the literature. Lethal distal effects are possible, as in MJ use that results in driving or other accidents.

Solutions to some of the respiratory problems have been developed; delivery systems such as foods and vaporizing methods have decreased the risks by providing alternatives to smoking MJ. Yet, new threats posed in the context of complete legalization, such as in Colorado, have led to safety problems. MJ is oil soluble and thus, when reduced to an oil or butter, can be added to many foods or beverages, sold as “edibles.” The foods often are sweet, such as candy, baked goods, and other items that appeal to children. When left to children’s access, there have been cases of overdose (Wang, Roosevelt, & Heard, 2013). This is problematic to the thousands of medical users who cannot smoke MJ (and in general to people who prefer not to take respiratory risks in recreational use). Edibles have a longer and more even bioavailability and thus are useful to relieve symptoms over a sustained period. However, here is another contradiction: measures to make MJ less harmful (through not smoking it) present new safety risks as MJ is overtly imperceptible as being present in these edible forms. We need more research and theoretical development and analysis of policy and practice concerns, considering the number of nursing problems that might be addressed by prescribing MJ and the lack of a knowledge base about the limitations and risks of these uses.

**WHAT SHOULD BE DONE?**

Clinically, MJ is being prescribed, but academically and empirically, this is being avoided in nursing science. It is not going away. Research is needed. Leadership is needed. Dialogue is needed. One of the difficulties with the conversation about MJ use is the paucity of rigorous and specific research available on efficacy for targeted uses and development of any means to allay potential negative MJ effects. Nurses in the substance misuse field have emergent questions about how to advise patients who might want to substitute MJ for addictive opiate analgesics. This is plausible from a harm reduction perspective. Nurses and patients need a solid foundation of evidence on which to base their decisions and behavior.

In part because of lack of research, the politics around MJ are often driven by ideology rather than evidence. The contradiction between the need for scientific evidence about MJ to support informed patient-centered medicine and the federal government’s restrictions on MJ research continues to obstruct progress in this area. Whereas researchers outside the United States have advanced the study of MJ and its biochemical interactions, prospective researchers in the United States must negotiate an “alphabet soup of federal agencies with divergent missions,” including the Federal Drug Administration, the National Institute on Drug Abuse, and the Drug Enforcement Agency (Bostwick, 2012). Policy reform is needed to remove obstacles to research and to provide the sound scientific evidence base needed for informed patient care.

**CONCLUSIONS**

Contradictions are resolved through expanding the knowledge base to confirm or disconfirm perspectives on MJ in terms of ethics, clinical effectiveness, and balancing risks and benefits. Qualitative studies with both recreational and medical users will clarify the diversities and commonalities of experience as well as the influence of expectancies and subjective factors on the “effects” of MJ. Quantitative research can focus on multivariate approaches and facilitate pinpointed clinical trials using MJ. With new MJ growers, and genetic hybrid manipulation, levels of various components of MJ may be linked with greater effectiveness to corresponding symptoms. We need population level research as well to track risks and benefits in states transitioning into legalization.

In states in which medical MJ is legalized, APNs who have prescribed MJ might be empowered by nursing leaders to share their experiences and patient outcomes, anecdotally, pointing to new empirical directions. Ultimately, evaluation must become systematic. Likewise, in these states, APNs should collaborate interprofessionally so that rigorous and relevant studies can be done and translated into practice fairly quickly; the situation is upon us, and a knowledge base is needed. We recommend that general as well as specialty nursing
organizations create leadership initiatives. In this context, nurse leaders are uniquely positioned to make a significant impact in knowledge building and policy making about MJ. Let us not relegate the topic and its associated contradictions to be simply a stigma-laden controversy to be avoided. Nursing must help create the future and not be left to react to it.

With MJ legalization comes regulation, and nursing needs to provide clear and strong voices in policy arenas. We need to be at the forefront of these cultural, social, legal, economic, and health transitions. Boards of nursing in MJ-legalized states can anticipate changes and challenges regarding their positions on MJ. There will be debate over many contradictory positions, but we should welcome this dialogue and embrace inquiry. Nurses need nursing leaders to actively participate in a national dialogue about these major, fast-moving political, cultural, and professional changes.

REFERENCES


In-Support-of-Patients-Safe-Access-to-Therapeutic-Marijuana.pdf


Copyright © 2016 International Nurses Society on Addictions. Unauthorized reproduction of this article is prohibited.