Cannabis and Harm Reduction: A Nursing Perspective

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SUMMARY. The goal of nursing care is to promote health and reduce harm caused by injury, disease, or poor self-care. Harm reduction is a public health model, which is gaining popularity as an effective modality to help persons reduce the negative consequences associated with their drug use. The harm reduction model blends well with the core principles of nursing. When viewed from a nursing perspective, cannabis could be an effective harm reduction agent based on its high benefit-low risk ratio when compared to other standard medications/drugs. As a medicine, cannabis has demonstrated a high therapeutic potential with relatively few side effects or adverse reactions. As a social/recreational drug, cannabis has a wide margin of safety with relatively few risks. The greatest risks from cannabis use are the legal consequences, which are the result of the cannabis prohibition rather than the drug itself. The therapeutic relationship between individuals and their health care providers is severely compromised by the cannabis prohibition. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <getinfo@haworthpressinc.com> Website: <http://www.HaworthPress. com> 2002 by The Haworth Press, Inc. All rights reserved.]

KEYWORDS. Cannabis, medical marijuana, harm reduction, nursing, social drug use, recreational drug use, adolescent drug use, cannabis prohibition, marijuana prohibition

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INTRODUCTION

Nursing is the art and science of caring. Since 1999 when nurses were included in the Gallup "Honesty and Ethics" poll, nurses have been rated as one of the most trusted professional groups by the American public (http://www.gallup.com/poll/releases/pro011205.asp). What is it about nurses that the public is willing to trust? Could it be that nurses often see people in their most vulnerable states and during that time treat them with respect and provide a safe environment to nurture them back to a more independent self-caring state? Nursing is much more than simply caring and providing comfort; it involves the art of knowing how to give the right kind of care and comfort to facilitate the healing process, and this knowledge is based in science. The goal of nursing care is to promote health and reduce the harm caused by injury, disease, or poor self-care.

Nurses are the largest group of health care professionals, and are keenly aware of the potential risks related to medications. While pharmacists dispense medications and physicians prescribe medications, nurses administer them to countless numbers of patients and monitor the effects of the medications. Nurses are in a key position to see not only the beneficial effects of a particular medication, but also the side effects or adverse reactions that can accompany medications even when used as recommended. Safe administration of medication is a critical skill all nurses must master because any error could cost a patient added suffering, organ damage, or could result in death.

Harm reduction is a public health approach to human behaviors, which involves helping persons learn to make better personal choices to minimize the potential risks associated with their behavior. Examples of harm reduction practices include using condoms properly during intercourse to avoid STDs, wearing a seatbelt when traveling in a motor vehicle, or using a helmet when riding a motorcycle. Today, harm reduction is gaining popularity as a more effective and realistic modality for helping persons who use drugs to reduce negative consequences associated with their drug use. Such harm reduction strategies include needle exchange programs for intravenous drug users to prevent blood-borne infections, use of a designated driver for persons consuming alcohol away from home, overdose prevention education, and offering a variety of drug treatment options (www.harmreduction.org).

Harm reduction is based on the premise that people are responsible for their behavior, that they make personal choices that affect their health and well-being, and that they can make safer and better decisions if given useful and honest information. The harm reduction approach accepts the fact that individuals will use drugs for various reasons and offers to help them "where they're at." In contrast, the War on Drugs is based on the premise that certain drugs are "bad" and that the government has the paternal right and duty to prohibit the use of these drugs. This "zero tolerance" or "just say no" approach condemns the use of certain drugs and

punishes those who use them. Acceptance comes after transgressors admit their wrongful ways and adhere to the abstinence option.

The underlying flaw in the war on drugs is the belief that some drugs are inherently bad and therefore deserve to be prohibited for the greater good of society. A drug is not simply good or bad, right or wrong, but rather the manner of use of a drug by an individual may be helpful or harmful. The harm reduction approach is based on science and the respect of others, while the war on drugs is based on moralistic ideology and the control of others. Drug use will always have the potential of causing sequelae. Harm reduction strives to minimize the harmful effects from drug use, while the drug prohibition creates more harmful effects from drug use.

Cannabis is an herbal agent that has been used as a medicine, a recreational drug, as well as a source of food and fiber. It is environmentally friendly, essentially non-toxic, yet currently forbidden by our federal government. US citizens are prohibited from growing this plant or possessing any of its leaves, seeds, stems or flowers. Physicians are forbidden to prescribe it for medical use. When the cannabis plant is examined in a scientific and logical manner, its therapeutic value becomes apparent. From a nursing perspective cannabis could be a useful harm reduction tool, yet the laws prohibiting its use present contrived risks that can cause more harm than the drug itself.

This article will examine cannabis as a harm reduction agent from a nursing perspective. Cannabis as medicine is not a magic bullet that will work for everyone, and is not without potential risks. Cannabis as a recreational drug is not enjoyable for everyone and is not harmless, but when put in the broader perspective and compared to standard medicines or common recreational drugs, cannabis offers greater benefit with fewer relative risks.

CANNABIS WAS A MEDICINE IN THE US

Prior to the prohibition of marijuana, cannabis products were widely used by physicians. By the 1930s there were 23 pharmaceutical companies producing cannabis preparations. In 1937, the passage of the Marihuana Tax Act marked the beginning of the cannabis prohibition. The head of the Federal Bureau of Narcotics (now the Drug Enforcement Administration or DEA), Harry Anslinger, led this legislative effort using exaggerations and lies (Bonnie and Whitebread 1974). During the congressional hearings the American Medical Association (AMA) opposed the Act and supported cannabis as a therapeutic agent. The law-makers won and the AMA has since given up the fight.

The Controlled Substances Act of 1970 furthered the cannabis prohibition when it called for a system to classify psychoactive drugs according to their risk potential. Five Schedules were created, with Schedule I being the most restrictive

category. Under the Act, cannabis was initially placed in Schedule I, but Congress called for a National Commission on Marihuana and Drug Abuse to determine whether or not that placement was appropriate. President Nixon appointed most of the commissioners including the former Republican Governor of Pennsylvania, Raymond Shafer, as the chairman. The "Shafer Commission" completed their study in 1972, and it remains the most comprehensive review of marijuana ever conducted by the federal government. In the end, the Shafer Commission concluded that cannabis did not belong in Schedule I and stated (National Commission on Marihuana and Drug Abuse 1972, p. 130), "Marihuana's relative potential for harm to the vast majority of individual users and its actual impact on society does not justify a social policy designed to seek out and firmly punish those who use it." The recommendations were ignored and cannabis remained in Schedule I, a forbidden drug.

Now, thirty years later, the infamous Nixon tapes of Oval Office conversations from 1971 to 1972 have been declassified and made available to the public (transcripts available at www.csdp.org). It is clear that Nixon used his political power to influence the outcome of the Shafer Commission, and when that didn't work he simply dismissed their recommendations and launched the war on drugs. Curiously, at the same time, the Bain Commission in The Netherlands (with a similar mission) issued its report with similar findings. The government of The Netherlands acted on the recommendations of the Bain Commission, and today the Dutch have half of the per capita cannabis use as the U.S., with far fewer drug-related problems at much lower drug enforcement costs (Zeese 2002).

CANNABIS AS A HARM REDUCTION MEDICINE

Compared to standard medications, cannabis has a remarkably wide margin of safety. In 1988, after a lengthy legal battle to reschedule cannabis, the DEA Administrative Law Judge, Francis Young, ruled that marijuana should be assigned to Schedule II and thus available for physicians to prescribe. In his summary he noted that (p. 57), "Marijuana in its natural form is one of the safest therapeutically active substances known to man." Throughout the centuries of its use, there has never been a death from cannabis (Abel 1980). In contrast, there are more than 32,000 deaths per year associated with prescription medications in hospitalized patients (Lazarou, Pomeranz and Corey 1998). All opioids carry the risk of overdose. Even over-the-counter (OTC) medications can be lethal. There are approximately 120 annual deaths from aspirin.

Cannabis has been studied extensively in regard to determining its health risks. General McCaffrey called upon the Institute of Medicine (IOM) to study the therapeutic value of marijuana in 1997. In March of 1999 the IOM released its 18-month study, which concluded that cannabis does have therapeutic value and

is safe for medical use (Joy, Watson and Benson 1999). Concern was noted about the potential risks related to smoking medicine, but the study concluded that for patients suffering from cancer or AIDS, the potential pulmonary risks were minimal when compared to the benefits. The study also noted that while more research is warranted, cannabis is safe enough for physicians to conduct N-of-1 studies on their patients who they believe could benefit from cannabis if other medications are not effective.

The IOM report put health risks associated with cannabis in perspective noting (p. 5), "... except for the harms associated with smoking, the adverse effects of marijuana use are within the range of effects tolerated for other medications." A recent study of the chronic effects of cannabis on four of the seven federally provided medical marijuana patients showed minor bronchitis in 2 of the patients (Russo et al. 2002). These patients smoked from 5 to 10 low-grade (2% to 4% THC content) cannabis cigarettes on a daily basis for 10 to 20 years. No other attributable long-term problems were noted, but rather a reduction in their use of other medications and a feeling of well-being was experienced by the patients.

While smoking cannabis may cause lung damage after chronic use, there are various actions that can be taken to reduce the harm from smoking. Patients can smoke less if using a high potency product (THC content greater than 10%) and can easily adjust the dosage by decreasing the number of inhalations. Also, when smoking cannabis, patients should limit their breath holding to less than ten seconds to avoid lung damage (Tashkin 2001). Vaporizers are being developed that heat the plant material to the point of vaporization without combustion, thus avoiding smoke inhalation (Gieringer 2001, Whittle, Guy and Robson 2001). Finally patients may use cannabis in alternative delivery forms such as pills, sublingual spray, eye drops, suppository, dermal patch, or salve, thereby eliminating pulmonary risks.

The federal government claims that cannabis is harmful to the immune system. When reviewing the published animal studies that reported harm to the immune system the reader should note that most of the researchers used delta-9-tetrahydrocannabinol (THC) rather than natural cannabis and that extremely high doses were used. A review of the active ingredients in cannabis suggests that some of these constituents act synergistically to enhance the beneficial effects of THC, while others may mitigate the harmful side effects of THC including possible immunosuppression (McPartland and Russo 2001). Given the thousands of immuno-compromised patients who have used cannabis there have been no reports of direct damage to the immune system from cannabis except when the patient has used a contaminated supply. Many AIDS patients who, by virtue of their disease have a severely compromised immune system, do not show any decline in their health status related to cannabis. In fact, a recent study of cannabis use by AIDS patients showed that cannabis did not interfere with protease

inhibitors and helped increase weight gain for a significant number of patients (Abrams et al. 2000).

Another cannabis risk has been an allegation that it causes brain damage. Although the federal government continues to use this scare tactic, modern research has not confirmed such findings. A Johns Hopkins study examined cannabis' effects on cognition on 1318 subjects over a 15-year period (Lyketsos et al. 1999). The researchers found no significant differences in cognitive decline between heavy users, light users, and nonusers of cannabis. They concluded that the results provided strong evidence of the absence of long-term residual effects of cannabis use on cognition.

Perhaps the most illogical argument the federal government uses to prohibit the therapeutic use of cannabis is that to allow its medical use would "send the wrong message to our youth." General Barry McCaffrey openly fought the growing popular opinion and scientific findings that cannabis has medical value. In response to the passage of state initiatives allowing the medical use of marijuana, McCaffrey dismissed its therapeutic value and declared that state laws allowing medical use of cannabis would increase the rate of drug use among teenagers. He stated, "While we are trying to educate American adolescents that psychoactive drugs are bad, now we have this apparent message that says 'No they're medicine. They're good for you'" (Substance Abuse Report 1996). That is nonsense. Teenagers don't think, "Insulin is medicine. It must be good for me." A persistent message that parents and health care professionals should demonstrate and reinforce with children and teenagers is that medicine is for sick people and that all medicine should be used with caution based upon an awareness of the risks and benefits.

Since nurses are advocates and health educators for patients, families, and communities, they have a key role in helping others learn to use medications safely. With more than 400,000 medication preparations available in the U.S. it is unlikely that any person can know everything about these medications. However, the user can reduce harm from medications by following some general guidelines designed to ensure that the risks are minimized. Mothers Against Misuse and Abuse (MAMA) has developed medication guidelines that persons may follow when using any OTC, prescribed medication, or recreational drug. The premise for these guidelines is that no medication is completely risk-free, but harm can be minimized if the user has appropriate information to make an informed decision. MAMA seeks opportunities to teach these guidelines to parents to help them set a good example for their children when it comes to the use of medications or recreational drugs (www. mamas.org). This includes essential information that nurses include in their patient education, such as the name of the medication, desired effect, possible side effects or adverse reactions, proper dosage and route of administration, risk of tolerance, dependence or drug interactions.

Pain is the most frequent symptom for patients seeking medical care. Cannabis analgesia provides a good example of its potential as a harm reduction medication. Innumerable chronic pain patients have found it difficult to find a balance between managing their pain and being able to function in daily life. Opiates are frequently used for management of severe pain, however they sometimes leave the patient feeling "drugged" and come with the risk of overdose and side effects such as constipation, nausea and vomiting. Increasingly, patients are acting on the advice of others and are trying cannabis as an analgesic.

Per numerous reports (Mathre 1985, Corral, Black and Dalotto 2002, Russo et al. 2002, Rosenblum and Wenner, 2002), the introduction of cannabis into pain management regimens has been very helpful. Most patients report a significant reduction in the use of opioids or need them on occasion for acute exacerbations; this reduction in the use of opioids lessens the risk for physical dependence. Cannabis is an effective antiemetic, and is not constipating. In summary, many chronic pain patients who use cannabis report that they feel better, experience fewer untoward side effects, are able to reduce their use of opioids and other medications, and are thereby able to eliminate additional side effects that may accompany those medications as well as the added risks from drug interactions.

Margo McCaffery (1968) has taught us that pain "is whatever the experiencing person says it is, existing whenever he says it does." Pain is a subjective experience and patient feedback is essential to effective pain management. Current national guidelines for pain management endorse McCaffery's standard (Jacox et al. 1994). Given patients' reports of pain control with cannabis and its relative safety, nurses recognize that cannabis should be an option for patients. To date 11 state nurses associations (AK, CA, CO, HI, MS, NJ, NM, NY, NC, VA, and WI) have passed formal resolutions supporting patient access to this medicine (www.medicalcannabis.com). In addition, the American Nurses Association's Congress on Nursing Practice issued a statement in 1996 calling for the education of all RNs on evidence-based therapeutic indications for cannabis.

CANNABIS AS A SOCIAL/RECREATIONAL DRUG

While the federal government may be waging a war on certain drugs, it is clear to onlookers that America is a drug using society. Americans are constantly bombarded with advertisements for drugs that can take care of any of life's problems. We have pills to help us sleep, to help us stay awake, to help us calm down, to help us feel better, to take away our pain, to regulate our bowels, and on and on. We tend to call these drugs, *medications*, and that identifies them as "good" drugs. Americans don't even consider caffeine as a drug, but for many a cup of coffee in the morning is a must to start their day. Caffeinated drinks are even marketed to our youth with such lines as: "Do the Dew"—as though kids need any

more energy. (For children with too much energy, we simply drug them with a "medication" such as Ritalin[®].) We also have regulated drugs that are acceptable for adult usage. Alcohol can be used for enjoyment: "This Bud's for you." The tobacco industry is struggling with the mandated health warnings and their advertisement ploys. "Smoking may cause lung cancer" versus "You've come a long way baby" or the "Joe Camel" character.

Psychoactive drug use has and will be a part of our society. In the American culture, drug experimentation among adolescents is considered normative behavior (Newcomb and Bentler 1988, Shedler and Block 1990). Adolescence is a time of transition, when young people are trying to determine their identity. Testing limits are part of their developmental process and the "forbidden" drugs are for many a temptation too great to resist. A longitudinal study investigated the psychological characteristics and drug use patterns in children studied from age 3 to 18 (Shedler and Block 1990). Those adolescents who experimented with drugs (primarily cannabis) were the "best-adjusted" compared to abstainers and frequent users.

These children were tested prior to the initiation of drug use and there were notable antecedent personality differences. The frequent users were found to be relatively maladjusted as children, unable to form good relationships, insecure and showed signs of emotional distress. The abstainers were relatively over controlled, timid, fearful, and morose. Authors described (p. 617), "... the picture of the frequent user that emerges is one of a troubled adolescent, an adolescent who is interpersonally alienated, emotionally withdrawn, and manifestly unhappy, and who expresses his or her maladjustment through uncontrolled, overtly antisocial behavior." In contrast, they noted (p. 618), "... the picture of the abstainer that emerges is of a relatively tense, overcontrolled, emotionally constricted individual who is somewhat socially isolated and lacking in interpersonal skills." The experimenters were found to be psychologically healthy, sociable, and reasonably inquisitive individuals. Twenty years earlier Hogan et al. (1970) compared marijuana users with non-users in a college population. They found that users (p. 63) "are more socially skilled, have a broader range of interests, are more adventuresome, and more concerned with the feelings of others." Nonusers were found to be (p. 61) "too deferential to external authority, narrow in their interests, and overcontrolled."

Shedler and Block (1990) also examined the quality of parenting the children received through direct observations of mother-child interactions when the children were 5 years old. Compared to the mothers of the experimenters, the mothers of the frequent users and abstainers (p. 624) "were perceived to be cold, critical, pressuring, and unresponsive to their children's needs." They found no noteworthy findings involving the fathers of frequent users. However, when compared to the fathers of experimenters, the fathers of abstainers were seen (p.

625) "as relatively unresponsive to their children's needs and as authoritarian, autocratic, and domineering."

The researchers caution readers not to misinterpret their findings as an encouragement for adolescents to use drugs. The findings do indicate that problem drug use is a symptom, not a cause of personal and social maladjustment. It is also helpful to understand that experimentation with certain behaviors can be expected with healthy adolescents. When it comes to the potential risks of drug experimentation, cannabis is a relatively safer drug choice.

The federal government has historically used the *stepping stone* hypothesis and gateway drug hypothesis as valid reasons for the marijuana prohibition. The stepping stone hypothesis presumes that there are pharmacological properties in cannabis that lead the user to progress to other drugs, while the gateway theory presumes that as an illicit drug cannabis serves as an entry to access other illicit drugs. The premise of both theories is that cannabis use leads to harder, more dangerous drug abuse. There is no question that cocaine, methamphetamine, heroin or other hard drug users may have used cannabis in their earlier stages of drug use, but there has never been a causal relationship established. In fact, most drug users begin with alcohol and nicotine, usually when they are too young to do so legally. The Shafer Commission noted (p. 88), "No verification is found of a causal relationship between marihuana use and subsequent heroin use." The IOM report found that (Joy, Watson and Benson 1999, p. 6), "There is no conclusive evidence that the drug effects of marijuana are causally linked to the subsequent abuse of other illicit drugs." More recently, a study by Jan van Ours of Tilberg University in The Netherlands, which will be published by the Centre for Economic Policy Research in London, also concluded that cannabis is not a gateway drug (Sunday Times 2001). It is not the cannabis that is associated with progression to other illicit drugs, but rather its illegal status that makes it a gateway drug.

When compared to the legal and regulated drugs such as alcohol and tobacco, cannabis is much less harmful. I have worked as a registered nurse for more than 25 years in acute care facilities and during the past 10, I have served as the addictions consult nurse in a university hospital setting. During that time I have had the typical nursing experience of caring for persons who were hospitalized as a result of their drug use. Common reasons for admissions related to alcohol abuse include: traumatic injuries secondary to acute intoxication (motor vehicle accidents, falls, fights, etc.), overdose with alcohol alone or in combination with other drugs/medications, life-threatening alcohol withdrawal, pancreatitis, liver disease, gastro-intestinal bleeding, cardiomyopathy, cardiac arrhythmias secondary to acute intoxication, depression, suicide attempts, various cancers, and malnutrition. Common admissions related to tobacco dependence include: heart attacks, vascular diseases, pulmonary problems, and various cancers. Hospital admissions for cannabis related health problems are rare. Alcohol is responsible for more than 100,000 annual deaths, nicotine for more than 430,700 (Schneider In-

stitute for Health Policy, 2001), while use of cannabis has never killed anyone due to toxicity.

Driving under the influence of alcohol is the second leading cause for motor vehicle accidents after fatigue. While driving under the influence of any psychoactive drug is not recommended, several studies have shown that cannabis use does not seem to significantly impair driving performance and thus is not associated with an increase in accidents (National Commission on Marihuana and Drug Abuse 1972, Hunter et al. 1998, Bates and Blakely 1999, Frood 2002). It seems that drivers on cannabis tend to be aware of their intoxicated state and therefore drive more cautiously to compensate. The new study by the Transport Research laboratory in England did find that drivers under the influence of cannabis showed impairment in their tracking ability (being able to hold a constant speed while following the middle of the road), but those with a blood alcohol level of 50 mg/dl (0.05 g) showed even more impairment (Frood 2002).

In 1996, two leading experts in psychoactive drugs rated 6 commonly used drugs (Hilts 1994) (Table 1). Henningfield and Benowitz ranked nicotine, heroin, cocaine, alcohol, caffeine, and marijuana according to their potential risks for withdrawal symptoms, reinforcement, tolerance, addiction, and intoxication. They rated marijuana as the least serious risk, except for intoxication in which they both ranked it above caffeine and nicotine.

In recent years, treatment programs have had an increase in admissions for "marijuana dependence." The reason for this increase seems to be due to the fact that individuals charged with marijuana offenses (usually simple possession) are offered a choice of incarceration or treatment. Most choose to stay out of prison and enter treatment for "marijuana dependence." Just recently, the current director of the Office of National Drug Control Policy (ONDCP), John Walters, spoke to 4,500 teens and adults at the Pride World Drug Prevention Conference in Cincinnati. He told the audience that 65% of drug-dependent people have a primary or secondary dependence on marijuana and that (Kranz 2002), "Marijuana is two-thirds of the addiction problem in America today . . . We have too many people trapped in addiction to marijuana because they thought it couldn't happen, or they were told it couldn't happen." Where did these numbers originate? Drug experts Henningfield and Benowitz ranked marijuana as the least likely to lead to addiction or dependence. Inquiries made to the ONDCP asking for the source of these figures have remained unanswered. The IOM report (1999) concluded that marijuana is not highly addictive. Hopefully the American public will not accept these gross exaggerations.

One must ask the question that given the health and social risks related to alcohol and tobacco, which are regulated drugs for adult use, why isn't cannabis regulated for adults to use as well? Politicians, such as Representative Barr and Senator Feinstein, have justified the continued marijuana prohibition by rationalizing that we simply shouldn't add another *dangerous* drug for adults. From a

TABLE 1. Ranking of Risk of 6 Commonly Used Drugs

	Withdrawal		Reinforcement		Tolerance		Dependence		Intoxication	
	NIDA	UCSF	NIDA	UCSF	NIDA	UCSF	NIDA	UCSF	NIDA	UCSF
Nicotine	3	3	4	4	2	4	1	1	5	6
Heroin	2	2	2	2	1	2	2	2	2	2
Cocaine	4	3	1	1	4	1	3	3	3	3
Alcohol	1	1	3	3	3	4	4	4	1	1
Caffeine	5	4	6	5	5	3	5	5	6	5
Marijuana	6	5	5	6	6	5	6	6	4	4

Ranking scale: 1 = Most serious 6 = Least serious

Explanation of terms

Withdrawal-Presence and severity of characteristic withdrawal symptoms.

Reinforcement–Substance's ability, in human and animal tests, to get users to take it repeatedly, and instead of other substances.

Tolerance—Amount of substance needed to satisfy increasing cravings, and level of plateau that is eventually reached.

Dependence (Addiction)—Difficulty in ending use of substance, relapse rate, percentage of people who become addicted, addicts self-reporting of degree of need for substance, and continued use in face of evidence that it causes harm.

Intoxication–Level of intoxication associated with addiction, personal, and social damage that substance causes.

By Dr. Jack E. Henningfield of the National Institute of Drug Abuse (NIDA) and Dr. Neal L. Benowitz of the University of California at San Francisco (UCSF), data from an article in the *New York Times* (August 2, 1994, p. C3)

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harm reduction perspective one would have to ask, why wouldn't it make sense to allow adults to choose to use cannabis, a drug that is much less harmful (this is not to say it is *harmless*) to individuals and society?

CANNABIS PROHIBITION CAUSES MORE HARM THAN THE DRUG

Cannabis is the most commonly used illicit recreational/social drug in the US. Today, at least 76 million Americans have tried it (Substance Abuse and Mental Health Services Administration 2000, p. G-4). Many of those Americans who have risked "breaking the law" by using cannabis have suffered harsh consequences. In 2000, 46.5% (or 734,497) of the 1,579,566 total arrests for drug

abuse violations were for cannabis. Of those, 88% (or 646,042 people) were arrested for possession alone (Federal Bureau of Investigation 2001). With mandatory minimums for drug offenses, the prison sentences for cannabis convictions can be as long as several decades to life. Why are we willing to spend so much on prison terms for non-violent marijuana offenders? Are they truly such a danger to society that we are willing to take away their freedom and pay up to \$40,000 per year per individual in prison costs? Would it not be wiser to allow them to continue to work and pay taxes? Couldn't this money be better spent by using it for drug addicts who are seeking treatment?

Children may be removed from their homes because a parent has been convicted of cannabis possession. Family members convicted of cannabis possession have been sent hundreds to thousands of miles away to serve time in overcrowded out-of-state prisons. These non-violent cannabis prisoners are often at the mercy of hardened criminals and suffer rapes, assaults and even death while in prison. Are they such a danger to society that we are willing to destroy the lives of these individuals and break up their families?

The Shafer Commission was very clear in their conclusions that such punishment was unwarranted (p. 78): "Neither the marihuana user nor the drug itself can be said to constitute a danger to public safety," and (p. 96), "Most users, young and old, demonstrate an average or above average degree of social functioning, academic achievement, and job performance." The Commission concluded (p. 41), "The most notable statement that can be made about the vast majority of marihuana users—experimenters and intermittent users—is that they are essentially indistinguishable from their non-marihuana using peers by any fundamental criterion other than their marihuana use." Yet hundreds of thousands of Americans remain behind bars separated from their families because of the marijuana prohibition. Readers may consult the web site of Families Against Mandatory Minimums (FAMM) for more information (www.famm.org).

Drug testing in the workplace remains a controversial issue. Most government organizations and private companies that perform drug testing conduct urine drug screens. To many this testing is an invasion of privacy, especially when done as a pre-employment requirement or random on-the-job testing. Urine testing is not a screen for drug abuse, it only tests for past drug use. There are numerous issues associated with drug testing, but cannabis poses a particular problem. The metabolites from THC are fat-soluble and can remain in the body for up to a month after the last use. Alcohol, in contrast, can be out of the system in a day (and is often not even included in the urine screen). Countless numbers of citizens have lost an opportunity for employment or been fired from their job based solely on a drug screen positive for cannabis.

There are waiting lists at many drug treatment facilities. Cannabis users who have been coerced into treatment by threat of incarceration or job loss are filling the openings that could and should be available for persons whose lives have

been destroyed by their drug addiction. This is not to say that no cannabis users may be in need of help, but rather there are alcoholics, IV drug addicts, crack cocaine addicts and others who have lost all control and are desperate for help that are turned away because there is no room for them.

The policy of prohibition interferes with the procedures necessary for quality control of this medication/drug necessary to prevent the risks of infection or other untoward reactions resulting from a contaminated product. Patients (especially AIDS patients) can suffer from a respiratory tract infection if the cannabis becomes moldy with the *Aspergillus* fungus (Krampf 1997, McPartland, Clarke and Watson 2000). Patients/users can also suffer toxic effects of other contaminants such as Paraquat, a highly toxic herbicide that was used by the federal government to destroy marijuana crops (McPartland, Clarke and Watson 2000).

The therapeutic use of cannabis could greatly reduce the financial costs to patients when they are able to eliminate other medications. The cost of therapeutic cannabis should be minimal in a regulated environment. However, prohibition has inflated the price of cannabis to that of gold. More important than the financial costs, patients who could benefit from the therapeutic use of cannabis are denied this medicine that may help them when all other medications have failed. There is no excuse for denying them the option of trying this medicine.

Denying patients access to therapeutic cannabis does nothing to prevent substance use/abuse among adolescents. The government claims they are concerned about drug abuse among our children and that by acknowledging the therapeutic potential of cannabis they would be sending the wrong message to our youth. Rather, the continued prohibition sends other more chilling messages to our youth: Their government is willing to put patients in prison simply for taking a medicine to ease their suffering. Their government will ignore, try to cover up, or lie about scientific studies that do not support its unjust policies/laws. If their government is lying about cannabis, what else is it lying about?

Finally, cannabis prohibition interferes with open communication between patients and their healthcare providers (Mathre 1985). Patients fear talking to their primary care provider because of possible negative reactions. Patients don't want their use noted in their health record because they fear there may be legal consequences. This fear of admitting to cannabis use to their healthcare provider interferes with the development of a trusting relationship. Healthcare professionals cannot adequately monitor the effects of cannabis if they aren't aware of its use. Health care professionals cannot educate the cannabis user about the potential risks of cannabis if they are unaware of its use.

CONCLUSIONS

The possibility of a "drug free" society is unrealistic. People seek and use drugs to feel better. Medications/drugs are not risk free, but the risks can be mini-

mized only with accurate and readily available information on the harmful effects prior to their use. Compared to most medications available today, cannabis is remarkably safe and effective and therefore should be available as an initial option to patients. As a social/recreational drug, the effects of cannabis are pleasant for many with little personal or societal risks and therefore may be the safer choice compared to other social/recreational drugs used by adults. While concern is justified about the dangers related to children and teenagers using drugs, the lies and cruelty of the marijuana prohibition are confusing to young people who learn not to trust their government. The harm resulting from the prohibition of cannabis costs individuals and our society as a whole much more than the drug itself.

When viewed from a nursing perspective, cannabis can be a useful therapeutic agent if it were legally available. Cannabis could be a useful harm reduction agent for substance abuse if it were regulated. The greatest harm from cannabis is the threat of legal consequences related to its illegal status. Nurses and other health care providers can play a vital role in reducing the harmful effects from medication/drug use. Health care professionals can teach patients and the public how to minimize the potentially harmful effects of cannabis when it is used as a medicine or social/recreational drug, but as long as cannabis remains in Schedule I, health care providers will be reluctant to talk with their patients about this drug. The role of the health care provider is severely compromised by cannabis prohibition and society suffers from this unjust, cruel, and costly policy.

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