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ORIGINAL ARTICLE

Health Effects of Using Cannabis for Therapeutic Purposes: A Gender Analysis of Users' Perspectives

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The purpose of this qualitative study was to describe how individuals who self-report therapeutic use of cannabis perceive its health effects. Data from 23 individual interviews were transcribed and analyzed. Understandings of gendered roles and identities were used to explore the data and interpret differences in perceptions. Descriptions of the health benefits of cannabis for therapeutic purposes included cannabis as life preserving, a disease therapy, a medicine for the mind, a means for self-management, and a way to manage addiction. Self-management of risks focused on the potential effects of excessive use, smoking-related risks, and purchasing precautions. Although the reports of women and men were similar in many respects, there were important differences in patterns and practices of use that reflected gender influences. Insights from the study provide direction for developing gender-specific information to support decision making and usage for therapeutic users.

Keywords cannabis, medical marijuana, gender influences, health benefits, perceived risks

INTRODUCTION

Information regarding the possible physical and psychological risks associated with high levels of recreational cannabis use continues to emerge. Simultaneously, a growing number of studies reporting the medical benefits of cannabis for people living with a diverse range of illnesses are evident in the literature (Amar, 2006). While cannabis remains an illegal substance in Canada, the Canadian government has created a regulatory framework for therapeutic use to provide a mechanism for legal access to cannabis for individuals with diagnosed medical conditions and debilitating symptoms. To date, there has been a remarkable lack of research into how individuals make sense of diverse and seemingly conflicting messages describing the health benefits and risks of using cannabis for therapeutic purposes (CTP). The goal of this article is to describe users' perceptions of the health effects of CTP and use a gender lens to explore similarities and differences among men and women and to provide direction for developing tailored information to support decision making regarding therapeutic use of cannabis.

BACKGROUND LITERATURE

Therapeutic Cannabis Use in Canada

Studies of the prevalence of cannabis use suggest that over 44% of Canadians have tried cannabis at least once in their lifetime and approximately 14% report use in the past year (Patton & Adlaf, 2005; Stockwell, Sturge, Jones, Fischer, & Carter, 2004). Furthermore, a 2004 national survey indicated that one third of current cannabis users in British Columbia and 28% of users in the rest of Canada reported using cannabis for medical reasons (Tjepkema, 2004). High-prevalence rates (14%–61%) of cannabis use have also been found in specific disease populations, including HIV/AIDS (Belle-Isle & Hathaway, 2007), multiple sclerosis (MS; Clark, Ware, Yazer, Murray, & Lynch 2003), and cancer (Tramer et al., 2001). There are also gender differences. Canadian men are more likely than women (50% vs. 39%) to have used cannabis recreationally at least once in their lifetime and to have used it more frequently (Patton & Adlaf, 2005). Similarly, therapeutic cannabis use in Canada is also more significantly associated with men (Ogborne & Smart, 2000; Ogborne,

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Smart, & Adlaf, 2000; Stockwell et al., 2004). These gender differences, however, are poorly understood.

Evidence Regarding the Health Benefits and Risks of Cannabis Use

CTP has been studied in a limited but growing number of clinical trials and its efficacy in symptom management in individuals with HIV/AIDS (Beal et al., 1995), MS (Zajicek et al., 2003), cancer (Tramer et al., 2001), and hepatitis C (HCV; Fischer et al., 2006) has been observed. As the visibility of cannabis in health care increases, the number of conditions for which cannabis has shown promising therapeutic effects has grown to include Alzheimer's disease (Eubanks et al., 2006), Parkinson's disease (Croxford, 2003), rheumatoid arthritis (Blake, Robson, Ho, Jubb, & McCabe, 2006), mood disorders (Ashton, Moore, Gallagher, & Young, 2005), and several others.

Researchers have examined the adverse health effects of cannabis use, particularly the risks associated with smoking cannabis that is by far the most common mode of administration among CTP users. Early research showed that heavy smoking of cannabis, independent from tobacco smoking, is associated with chronic inflammation of the respiratory tract (Taylor, Poulton, Moffitt, Ramankutty, & Sears, 2000), impaired lung function (Tetrault et al., 2007), and other respiratory complications (Sherrill, 1991). Although some studies suggest cannabis use increases an individual's risk of experiencing a cardiovascular event (Aryana & Williams, 2007) and can precipitate the development of psychotic disorders (Hall, Degenhardt, & Teesson, 2004), conflicting results have also been reported (Degenhardt, Hall, & Lynskey, 2003; Rodondi, Pletcher, Liu, Hulley, & Sidney, 2006). Empirical evidence has also emerged that suggests chronic cannabis users exhibit dependence behaviors and mild withdrawal symptoms when attempting to cease cannabis use (Budney, Hughes, Moore, & Vandrey, 2004). Nonetheless, the validity of this evidence has also been criticized for its lack of controlled studies and the absence of operational definitions of withdrawal symptoms and severity (Smith, 2002; Soellner, 2005).

Perceived Health Benefits and Risks of CTP

Individuals' perceptions of the health benefits and risks of using CTP have also been examined. Among current users, CTP is perceived as superior to conventional medications in the treatment of various illnesses (Coomber, Oliver, & Morris, 2003; Ware, Adams, & Guy, 2005). Persons with MS report CTP to be helpful in relieving both specific symptoms (e.g., reduction in pain, tremors, numbness, falling/balance problems) and general symptoms (e.g., relaxation of whole body, stress relief; Clark, Ware, Yazer, Murraym, & Lynch, 2004; Page & Verhoef, 2006; Page, Verhoef, Stebbins, Metz, & Levy, 2003). While those with HIV/AIDS report that the benefits of CTP use include decreased anxiety/depression, pain, nausea and vomiting, and increased appetite (Braitstein et al., 2001; Prentiss, Power, Balmas, Tzuang, & Israelski, 2004), as well as improved adherence to antiretroviral therapy (de Jong, Prentiss, McFarland, Machekano, & Israelski, 2005). Perceptions of negative health effects by CTP users include impaired cognition and balance, fatigue and/or insomnia, dry mouth/throat, mood changes, anxiety and paranoia, and the feeling of being high (Harris et al., 2000; Howard, Kofi, Holdcroft, Korn, & Davies, 2005; Page & Verhoef, 2006; Swift, Gates, & Dillon, 2005; Ware, Rueda, Singer, & Kilby, 2003). However, these were perceived to be rare and manageable. CTP users also perceive cannabis as a useful complementary therapy to existing medications because it produces fewer adverse effects and enables them to reduce or discontinue conventional medications (Reiman, 2009; Swift et al., 2005; Ware et al., 2005). The use of CTP has also been linked to relieving side effects of conventional medications and reinstating patients' "control" across their illness trajectories (Coomber et al., 2003).

Therapeutic Cannabis and Gender

Researchers have begun to explore how gender influences CTP use. Gender refers to socially prescribed and experienced roles, attitudes, and behaviors that influence gender identity and health practices (Bird & Rieker, 1999). Gendered dimensions of "femaleness" and "maleness" are increasingly recognized as important health determinants and an essential aspect of health research (Johnson, Greaves, & Repta, 2009). In the case of CTP use, there is some evidence that more men report CTP use than women (Page et al., 2003; Ware et al., 2003), and in a study of HIV/AIDS patients, women were found to be more likely to use cannabis for strictly therapeutic purposes, whereas men used it both therapeutically and recreationally (Furler, Einarson, Millson, Walmsley, & Bendayan, 2004). Swift and colleagues (2005) observed that among CTP users, men were typically long-term users (more than 1 year) who used CTP several times a day, while women reported more inconsistent and short-term use. However, when asked to compare the effects of CTP with other medications, few gender differences emerged aside from slightly more men reporting reduced use of conventional medications and higher satisfaction with CTP compared with conventional medications. As the role of CTP expands in the management of chronic illnesses, particularly among those diseases with higher reported incidence in women than men (e.g., MS, chronic pain, fibromyalgia, and arthritis), further investigation of gendered experiences is necessary.

In light of the existing policy context and evidence surrounding CTP use, the specific research questions guiding this study were as follows: (1) How do individuals who self-report using CTP perceive the potential health effects of cannabis use? (2) What role does gender play in the perception of the potential health effects of CTP use? (3) How do messages and regulations related to CTP influence men's and women's perceptions and decision making regarding CTP?

METHODS

A qualitative descriptive design informed by the tenets of naturalistic inquiry (Lincoln & Guba, 1985) and

gender-based methodology (Women's Health Bureau, 2003). The assumptions underlying the later approach were (1) social constructions of gender shape individual experience, (2) gendered experiences are informed by one's position in society, and (3) there is a prevailing gender order in which dominant forms of masculinity subordinate women (and some men) and create unequal access to social power and resources.

Study Setting

This study was conducted in south-western British Columbia, Canada. The use of CTP in Canada is directly influenced by laws surrounding cannabis production, distribution, and use. Individuals seeking to legally use CTP must apply to Health Canada's Medical Marihuana Access Division (MMAD) and have a diagnosis within one of two categories: (1) receiving compassionate end-of-life care or suffering from specific serious medical conditions (i.e., MS, spinal cord injury/disease, cancer, HIV/AIDS, arthritis, or epilepsy) or (2) have a serious medical condition (other than those in Category 1) where conventional treatments have failed or are inappropriate (Health Canada, 2005). Health Canada maintains that "marihuana is not an approved therapeutic product and the provision of this information should not be interpreted as an endorsement of the use of this product, or marihuana generally," (Health Canada, 2003). Those authorized to possess cannabis under the Marihuana Medical Access Regulations (MMAR) can obtain a legal supply of dried cannabis in three ways: (1) access Health Canada's cannabis supply, (2) obtain a license from Health Canada to produce for themselves, and (3) to obtain a license from Health Canada to designate someone to produce on their behalf. However, CTP has also been available in Canada to individuals with medical documentation of a chronic or debilitating illness through community-based medical cannabis dispensaries. These dispensaries, often referred to as compassion clubs, provide illegal, high-quality cannabis to their members with medical documentation of an illness along with education regarding safe and effective use of cannabis (Capler & Lucas, 2006). Although operating outside of Canadian laws, these organizations have attracted over 11,000 members nationwide (Lucas, 2008). Since completing data collection for this research, a police "crackdown" on compassion centres in Quebec has resulted in several arrests and the closure of five dispensaries (Health Canada, 2010; "Quebec compassion club," 2010). Other compassion centres in Canada continue to operate in other jurisdictions. Mixed messages reflected in regulations, policy statements and police actions, as well as public health strategies directed toward reducing cannabis use, create a complex context for women and men making informed decisions about CTP use.

Recruitment and Sampling

Following ethics approval by a university review board, purposive sampling was employed to recruit men and women who were CTP users. Specifically, our decision to recruit a sample for heterogeneity was guided by our desire to understand how CTP use is perceived by diverse subgroups of men and women (i.e., different health conditions and social contexts). Participants were recruited through an online forum and through four British Columbia community-based compassion centers. Individuals were eligible if they (1) self-reported CTP use in the last 30 days and for over 6 months, (2) were at least 19 years of age, and (3) were English speaking. Following procedures outlined by the ethics review board, participants were given a consent form to review and then gave their consent verbally on tape. All participating individuals received a C$25 honorarium for their time. Thirteen women (including two participants who self-identified as transgendered) and 10 men participated in the study. To recognize the authenticity of their identities and transformations (Lombardi, 2001), the interviews of the transgendered (male to female) participants were included in the women's data. The average age of participants was 45 ($\bar{x} = 46$ years for women and 43 years for men). Three women and two men were married or in a common-law relationship; the remaining were single, divorced, or separated. The majority of the sample was White/Caucasian; other groups represented included Aboriginal (5), South Asian (2), and Japanese (1). Although all participants completed high school and a majority had postsecondary education, reported annual income was low by Canadian standards ($\bar{x} = \$13{,}250$ for women and $29,300 for men). The participants were long-term ($\bar{x} = 8.3$ years, range = 2–16 years) and current CTP users, with formal diagnoses that met either Health Canada or compassion society eligibility requirements. Health conditions included HIV/AIDS (3 women, 3 men), fibromyalgia (3 women, 2 men), arthritis (2 women, 2 men), mood/anxiety disorders (3 women), cancer (1 woman, 1 man), neurological disorders (1 woman, 1 man), gender dysphoria (2 women), and HCV, epilepsy, MS, and chronic pain (each reported by 1 man). Many of the participants reported more than one health problem. All participants reported smoking CTP, although other common methods of use included eating cannabis and using a vaporizer. A few reported using tinctures, sprays, or poultices to administer the drug. Estimating the amount of cannabis used each month was difficult for some participants, because the money they had to purchase the drug varied from month to month. Furthermore, it was often difficult to keep track of the amount they used (in grams) when it came from various sources (i.e., their own plants, provided by friends, and purchases). While some accessed CTP through compassion clubs (12 women, 8 men), others were licensed growers (6 women, 4 men), nonlicensed growers (5 women, 5 men), or purchased cannabis through the Health Canada program (5 women).

Data Collection

Data collection involved semistructured, individual face-to-face or telephone interviews conducted by a trained male research assistant or the female project manager. With a few exceptions, participants were interviewed by

a research staff member of the same gender. Participants were asked about their attitudes toward and experiences of CTP use including their perceptions of the health effects of CTP. Interviews were conducted in a location convenient to the participant and lasted 1–3 hours. A short survey was used to collect demographic data, history of cannabis use, and information about the health issues influencing CTP use.

Data Analysis

Employing an inductive thematic approach to data analysis (Lincoln & Guba, 1985), interview transcripts were read and reread by the authors and passages that reflected emergent ideas, themes, and examples were highlighted. In investigative team meetings, independent reviews of the data were summated and shared to reach consensus about categories for coding the data. The qualitative data management software program, NVivo, was used to organize the data for retrieval and in-depth analysis. Comparative strategies were used to explore participants' perceptions of CTP across and within genders. To extend interpretation of the data from the perspective of gender, we focused on the influence of gender roles as well as gender identities, drawing on understandings of hegemonic masculine and feminine ideals that shape individual identities and practices (Howson, 2006; Schippers, 2007). We used these concepts of gender to explore the data (e.g., by raising questions about whether patterns in the data might reflect gendered roles or gendered identities) and offer explanations of differences reflected in women and men's practices with respect to CTP.

RESULTS

Participants were eager to share their perceptions about the health benefits of CTP. For many, this eagerness may have been reinforced by experiences of sustained respite, often for the first time, in a long trajectory of efforts to address health problems. It was also clear they believed that this medicine, which they found so valuable in a culture that did not consistently support its use, needed to be more available to people who needed it. The health effects of CTP use emerged from personal experiences of accessing and trying cannabis to treat health problems and finding a therapeutic regime that best met their individual needs. Themes related to perceived health benefits included cannabis as life preserving, an adjuvant disease therapy, a medicine for the mind, a means toward self-management, and a way of managing addiction. The health risks of using CTP were largely discounted, and participants presented themselves as responsible consumers who were able to manage potential risks in relation to purchasing the drug, excessive use, and smoking. The influence of gender and contextual factors are highlighted, when these were evident in themes related to both perceived health benefits and risks.

Health Benefits of CTP

Constructions of Cannabis as Life Preserving

Participant narratives often began with detailed accounts about complex health problems and a long history of efforts to find effective medical treatments. Underlying many participant stories was increasing despair and desperation, as medical treatments failed to live up to expectations and/or were accompanied by intolerable side effects. In these situations, often without any other options, the participants tried CTP. The therapeutic effects of cannabis were reported to be immediate in many instances, and for the first time in many years, participants could manage life again. In these narratives, cannabis was constructed as life preserving.

While the circumstances leading individuals toward CTP were similar among men and women, gender differences emerged in how cannabis was constructed as life preserving. For women, cannabis was a "holistic" therapeutic tool, enabling them to keep on living despite their diagnoses. Women were strongly committed to using CTP, in part, because they attributed their survival to their use of the drug. When asked to complete the sentence, "To me, cannabis is . . .," three women responded by stating it was their "lifesaver." Other descriptions included CTP as a "life force" and a "lifelong partner." A woman in her 30s who had used CTP daily for over 15 years suggested that she had no choice in using cannabis because it enabled her to function each day. When asked what she would do if her access to CTP was lost, she replied, "I would die, there's no doubt in my mind that I would die of my disease."

In contrast, men were less likely to explicitly frame CTP as life preserving. However, those who did held pragmatic views of the benefits of CTP reflected in their focus on the functional benefits of cannabis. For example, several described it as a medicine that "works quite well when you need it." One man matter-of-factly stated that it was a "necessary product," while another positioned cannabis as life preserving because it reinstated his control and the conduit through which he was able to "present [himself] to the world":

> I know for a fact what it's [CTP] done because at one stage of my life I wasn't able to eat and I was less than a hundred and forty pounds, I was almost dead so to me it's already proven itself. I hopefully will keep myself together in this process but it's done its job and I'm happy with it.

Constructions of Cannabis as an Adjuvant Disease Therapy

Constructions of CTP as an adjuvant disease therapy prevailed across participants and reflected their desire to assemble the most effective treatment regime possible for the chronic diseases they were experiencing. In this context, CTP was used strategically by both men and women as a supplemental aid to ensure their adherence to prescribed drug regimens needed to manage their chronic illness. One participant, a 39-year-old woman with HIV/AIDS, maintained, "I need [CTP] to take my medication, that's the biggest thing, if I don't have my

appetite, I don't take my medication and then there's problems." Similarly, a man diagnosed with AIDS and HCV explained:

> Well, it's a great supplementary treatment when you're dealing with AIDS or hepatitis [HCV], it reduces pain, it calms you down, it gets rid of nausea, it gives you an appetite. So as far as I'm concerned it's quite beneficial... [and] with hepatitis and the AIDS drugs, sometimes you have a heck of a problem taking the pills [because] they just come back up... so once in a while I'll just take some marijuana.

Despite using both CTP and prescription medications, efforts were often made to avoid using them simultaneously to maximize the individual effects of these substances and/or to offset any negative interactions. One man with attention-deficit hyperactivity disorder (ADHD) and a CTP user for over 25 years stated, "If I use [prescription methylphenidate and cannabis together], it messes the marijuana, it messes up the whole process, it makes me tired, it doesn't work right, it has to be an hour ahead." Additionally, he would alternate his CTP use with methylphenidate daily to increase its effectiveness, to achieve a "balance" in their desired effects, and to avoid developing a tolerance for both drugs.

Constructions of Cannabis as Medicine for the Mind

CTP was also linked to significant improvements in mental health. The benefits were most often verbalized by women and were among the most significant benefits they attributed to cannabis. For example, a 51-year-old woman with bipolar disorder stated that her improved mood has been "the most important effect" of CTP. Another woman stated that CTP helped her deal with depression related to her terminal prognosis and reduced her anxiety and stress. CTP enabled her to gain a logical perspective of her prognosis and achieve a sense of detachment and clarity toward an otherwise highly stressful situation:

> I would be terribly depressed without it [CTP]... I don't find that I'm going through the same up and down that I would go through with dealing with my death. I mean, it's hard. It's difficult to deal with this.

Most men, on the other hand, focused on CTP's physical health benefits. However, some reported mental health benefits. Typically, their use was most often related to quelling anger and controlling rage both of which are common masculine characteristics of men's depression (Branney & White, 2008). A 36-year-old man described how CTP had improved his affect: "I also use it now for keeping my anger in control when I rage... I guess the marijuana calms me down, I've been using it to calm me down way before I figured out that I had ADHD." Likewise, a 38-year-old man diagnosed with HCV initially began using CTP to control his temper related to an underlying depression:

> I was so depressed it was ridiculous and honestly I started smoking probably more for the depression .... So I'm smoking a joint every 40 minutes because to me that's what it takes to maintain a glow and keep my life moving along in a fashion that I can deal with it and I don't have obstacles that are too challenging and I don't lose my temper with people.

Thus, there were important differences in the way women and men framed their use of CTP for mental health. Women's narratives invoked feminine ideals (e.g., related to recognizing and managing emotions) and the legitimacy of treating women's mental illness (which more commonly afflicts women). Men's narratives, on the other hand, focused on using CTP to dull or blunt experiences and expressions of depression, which might also be interpreted as naturally occurring and culturally tolerated masculine ideals.

Constructions of Cannabis as a Means to Self-management

CTP was conceived by many participants as being beneficial to their health because it enabled them to take control over their health by choosing a drug that they perceived to be a safer and more effective alternative to prescription medications. For both men and women, these perceptions were based on the limited success or relief they received from conventional medications. In this context, conventional drugs were classified as "toxic" and likely to cause more harm than good and potentially hasten one's death. Fears of being "overtoxified" were substantiated by unwanted side effects experienced while taking prescribed medications. Frustrated with therapies affording limited success or relief, replacing prescribed medications with CTP provided a way for participants to take control over managing their health conditions because it placed them in charge of prescribing their own medication. The illegal status of cannabis and health care providers' lack of knowledge to direct its use provided additional impetus for self-management when it came to using CTP.

There were, however, important gender differences with regard to using CTP for self-management. Men's approach to CTP reflected masculine preferences for self-monitoring, self-reliance in illness management, and, at times, avoidance of professional health services (Oliffe & Phillips, 2008). Accordingly, men were more likely to draw on their previous successful experiences with CTP in positioning it as their "first line of defence." As one man explained, "I've used cannabis all of my life and I just decided to stick with using cannabis." Women, on the other hand, were more likely to engage with health providers, progressing toward illness self-management while continuing to use but hoping to wean themselves off prescribed medications. As one woman with Crohn's disease described the uptake of CTP was thoughtfully considered and incrementally integrated as a possible substitute for conventional medicine:

> I [was] on a variety of different prescription drugs through the years. I was dying. My system was collapsing, I could feel my intestinal tract rotting and I found I was very nauseated with [mesalamine], the prednisone made me feel bloated, uncomfortable, slightly depressed... a dear friend of mine from childhood suggested to me why don't you start smoking pot and I tried it. I found immediately the cannabis was like a baby blanket and I started to

wean myself off of the pharmaceuticals and I stopped asking for prescriptions from my general practitioner.

Constructions of Cannabis as a Way to Manage Addiction

Since the risk of addiction with long-term cannabis use has not been clearly established, it was perhaps not surprising that participants did not focus per se on any real or imagined potential for addiction to cannabis itself. Instead, using CTP was viewed as a valuable aid in managing other addictions because of its perceived benefits as a substitute for addictive substances and a treatment for withdrawal symptoms. Positioning CTP as the "lesser of two evils," CTP use was particularly important in reducing the uptake of alcohol, tobacco, and street drugs. For one man (CTP user for over 10 years, HCV), cannabis was integral in reducing his excessive use of alcohol and tobacco—his self-described "temptations." Through his personal experiences and observations of others, he supported using cannabis as a "substitute" for addictive substances and espoused its benefits in keeping others away from illicit drugs and alcohol. In a similar vein, one woman (aged 39, HIV/AIDS) had previously been a "practicing alcoholic," but since beginning to use CTP, her use of alcohol and other illicit drugs had drastically reduced. She conceptualized her use of CTP as an effective means of harm reduction, stating, "It keeps me from doing all kinds of other nasty stuffs like all the street drugs, [including] cocaine, speed." Another woman (aged 63, fibromyalgia) indicated that she was first introduced to the therapeutic benefits of CTP when she began to wean herself off of her addiction to heroin and cocaine. As her use of CTP progressed, she began to experience additional therapeutic benefits (e.g., pain relief) and believed it was the "gateway" out of addiction. Interestingly, some women's conceptions of using CTP in the management of addiction were in reference to avoiding addiction to prescribed medications for the treatment of their illnesses (e.g., pain killers). For one woman who suffered from extreme pain and fibromyalgia (aged 59), conventional medication meant "struggling not to be addicted" to drugs such as acetaminophen, codeine, and lorazepam. CTP offered her another option and enabled her to discontinue using these drugs because it provided a "very calming place for [her] and for [her] pain."

Management of CTP Health Risks

In general, participants were not overtly concerned with the health risks of using CTP. When potential risks were discussed, participants often considered these to be overstated by experts. Participants argued that there were risks associated with prescribed medications and that in this respect CTP was no different. They were willing to live with any risks posed by CTP in order to receive the benefits they valued so highly. Having made the decision to use CTP, participants focused on how to manage potential CTP health risks. As a 27-year-old man with cancer explained, "I'm trying to do it [CTP] as healthy as possible... but I am aware of the negative effects and that's part of any drug, and it definitely the benefits outweigh the negativity." Self-management of risks focused on the potential effects of excessive use, smoking-related risks, and safe access.

Avoiding Effects of Excessive Use

The potential for addiction associated with the use of CTP was discussed by some participants. Men were more likely than women to discount the potential for addiction, suggesting that physical addiction to cannabis was unlikely, while conceding that therapeutic users might develop a psychological or behavioral attachment to the drug. To test his dependence, one man would periodically quit using CTP for a few days to "reset [his] clock," a practice that resulted in vivid dreams, nausea, and a shorter attention span. However, these symptoms were not debilitating for him, and when he compared these withdrawal symptoms with other medications and substances, he considered them "very small."

The potential for health risks associated with the excessive use of CTP was linked to the circumstances surrounding its use and an individual's characteristics, rather than the cannabis itself. Several participants suggested that these risks only became an issue when CTP use expanded beyond what they considered to be therapeutic levels. Women suggested that smoking CTP was likely to be problematic when the person was a "chronic user" consuming "exaggerated amounts" over a period of several years. The men generally took a more pragmatic view of this, believing that there was no prescribed or absolute dose where CTP became problematic. Rather, consumption levels needed to be considered in light of an individual's tolerance and the impact it had on his or her life.

Participants frequently provided detailed explanations of their efforts to use only the amounts of CTP needed to address their health concerns. The right amount of CTP to use was often determined (particularly by unlicensed CTP users) through trial and error because specific dosages were not recommended by doctors, and the amount used often needed to be retitrated in response to changes in symptoms and disease progression. And while they sometimes used more than they thought they needed, only one participant (aged 55, woman, daily consumer) believed that she had experienced serious side effects from using too much CTP in an attempt to reduce her need for chemotherapy. However, despite the side effects experienced, she did not consider stopping her use of CTP and simply reduced her intake.

Smoking Cannabis

Although many participants expressed smoking-related concerns (including coughing, lung/breathing difficulties, and fear of lung cancer), most participants primarily smoked CTP. For some, these risks were not perceived as serious and were manageable. Several men and women believed that smoking-related health issues emerged when the amount consumed was very high and the product was of low quality. Because of their access to high-quality cannabis, they believed that the amount needed to manage

their symptoms was minimized. While participants knew of other methods for administering CTP, they continued to smoke because it was convenient and affordable and enabled them to more effectively regulate their dosing. As one woman stated:

> Smoking is the [poorest] option but reliability and consistency and amount of dosing eating-wise is equally unpredictable and difficult, and to almost double the amount you're consuming orally to what you're smoking. . .. it becomes ridiculously overpriced.

Some participants believed that smoking CTP posed no added risk to their health. Several indicated that they had "perfect" lungs despite their use and believed that they were "a lot more safe" smoking cannabis than anything else. One man questioned the impact of his smoking CTP since he had previously smoked tobacco and questioned, "What's a couple of joints going to do anyway?" He additionally suggested that while tobacco cigarettes offered "absolutely no benefit," at least CTP had "some benefits." Although practices related to smoking tobacco are gendered (World Health Organisation, 2007), in the context of smoking CTP parallel to gender influences appeared to be muted because across women and men in this study the impact of the drug was foregrounded.

Safe Access

The complex and often gray legal climate regarding the use of and access to CTP in Canada created particular challenges for the study participants. They were aware of the possible health risks posed by accessing CTP from "street" and other unregulated sources. Characterizing this activity as "hit and miss," several participants suggested that purchasing from these sources was accompanied by two major hazards. First, the risk of using cannabis of unknown strain and quality was considered to result in inadequate relief. Not knowing the specific strains they purchased was a concern for the participants because they might not experience the desired effects. A woman with rheumatoid arthritis suggested that some strains were too strong for her and could worsen her symptoms. Consequently, not knowing the strain she used was potentially hazardous to her health. Participants also expressed concern over not knowing the particular growing conditions of cannabis because this had a direct effect on the quality. Purchasing cannabis that was potentially moldy or grown improperly, a common characteristic of street-level cannabis according to participants, was considered a high-risk activity and needed to be avoided.

Second, accessing unregulated cannabis was associated with the potential for purchasing cannabis "laced" with dangerous drugs or chemicals, including cocaine, crystal methamphetamine, heroin, ecstasy, and others. Participants listed addiction and death as the primary consequences of using laced cannabis. One woman described her firsthand experience:

> Oh my God, you can get anything mixed in with it. My boyfriend who died of cancer smoked some with me one night that he'd gotten off the street and he [had] a heart attack, he [had] a stroke. . . and I knew it was laced with something, methamphetamine or something. . . you just don't know what you're getting and it's very dangerous.

To minimize these risks, participants chose to only access "safe" cannabis primarily through trusted and established channels, such as well-known friends and acquaintances, their local compassion centers, or they grew it themselves. Among the participants only five (all women) accessed cannabis directly through the Health Canada program, perhaps reflecting women's law-abiding and risk-aversive tendencies compared with men. Several participants praised the support they received through their compassion center (and often advised others to use them) because they could choose their preferred strain and were guaranteed premium quality cannabis products. One 63-year-old woman who used CTP on a daily basis explained:

> The [centre I purchase from] is fantastic. You're assured of the quality. You're assured of what kind of dope you want to smoke. It's great. It's like, you know, being able to go to the supermarket and just buy it and know you're not being hassled or going up some strange person's apartment to buy what you're not sure of.

Also, the use of trusted sources (e.g., compassion centers) to access cannabis represented important efforts to minimize their involvement in (or the perception of engaging in) overt criminal activity and protect their personal safety, despite the illegal status of cannabis accessed through these means. In the case of participants authorized to possess cannabis under Health Canada's MMAR, the approval was perceived to validate their medical need for the drug and provide legal protection in addition to a safe supply. Participants believed that the potential health risks of using CTP were related to cannabis prohibition, not the cannabis itself, and that supply through a controlled and regulated market would minimize these risks.

DISCUSSION

The experiences related to using CTP described herein provide important empirical evidence to supplement and extend the growing body of knowledge addressing cannabis use for medical conditions. In contrast to the framing of cannabis as an unproven medicine, participants perceived significant benefits from CTP and positioned themselves as responsible and knowledgeable CTP users. Constructions of the benefits of CTP use as life preserving, an adjunct disease therapy, medication for the mind, a means to self-management, and a way to manage addictions suggest a range of perceived benefits that extend beyond those reported elsewhere. Similar to Reiman's study (2009), participants' perceptions of the use of cannabis as a harm reduction tool to manage addictions associated with other types of substance use stood in direct contrast to traditional views of cannabis as a gateway drug. Furthermore, participants did not consider that cannabis might be a replacement addiction because few believed they experienced any symptoms associated with cannabis dependence. Instead, views of cannabis were shaped by perceptions of its benefits and the lack of serious side

effects in using cannabis in comparison with other addictive substances and prescription drugs. In summary, discourses that question the therapeutic benefit of cannabis were largely ignored by participants.

In relation to the health risks of using cannabis, participants in this study positioned themselves as aware of potential risks and constructed them as relatively minor in comparison with the benefits they received. Mental health risks reported in the literature (Moore et al., 2007) were not supported by the participants in our study. Their views are supported by a recent review of cohort studies suggesting serious psychotic disorders may not be directly related to cannabis use (McLaren, Silins, Hutchinson, Mattick, & Hall, 2010).

While difference tends to be the feedstock of gender analyses, important similarities were observed among women and men participating in this study. For example, the desire to self-manage their illness and treatment, along with many of the practices used in relation to purchase/production (access), dosage (titration), and route of administration (smoking), revealed thoughtful engagement in using CTP on the part of both men and women. This level of interest in self-care may be a reflection of the context in which participants were using cannabis where many were living with poorly managed chronic illnesses via conventional therapies, CTP use was not fully supported by physicians and family members, and in many cases, participants were engaged in illegal activity to use this medication. A high level of independence and persistence was needed to use cannabis as a medication. In addition, it is noteworthy that self-care is affirmed as a feminine ideal but marks a departure from the health practices typically expected of men (Galdas, Cheater, & Marshall, 2005). Men's tendency for frequent and long-term use of cannabis (including recreational cannabis) and willingness to participate in illegal activity has the potential to afford them more access to cannabis than women, which in effect may have leveraged and legitimated men's knowledge and expertise around CTP.

There was also evidence of gender differences in constructions of the health effects associated with using CTP. The women in our study consistently detailed their CTP experiences at the nexus of self and professional management (i.e., by physicians and other health care providers), and their patterns of CTP usage suggest a collaborative enterprise by many participants amid emancipatory endeavors to be self-sufficient through CTP. Feminine ideals position women as connected emotionally and somatically with their bodies, yet conciliatory with medical management (Lyons, 2009). Men, on the other hand, tended to treat symptoms as needed, reflecting tendencies to be more amenable to self-management than seeking or receiving professional help (Courtenay, 2000; Lee & Owens, 2002). These common men's health practices serve to reinstate the physical and emotional control that is central to idealized masculine identities, characteristics that are so often threatened and eroded by illness and disease (Charmaz, 1995). Varying alignments to masculine and feminine ideals in health practices and evidence that gender may play a role in CTP use and decision making indicate the potential usefulness of further research to explore the need for gender-sensitive decision support for individuals contemplating and using CTP.

With the privileging of the health benefits of cannabis over the potential health risks reported by participants in this study, information resources that adopt a pejorative approach to cannabis (e.g., abstinence, addiction) are unlikely to be effective in translating knowledge or to have significant uptake within populations using CTP. Instead, a therapeutic-centered approach that acknowledges the social, gendered, and health reality of individuals who use CTP is needed, while transmitting key harm reduction messages aimed at ameliorating the potential risks associated with cannabis in the context of therapeutic use. Within the drug education literature, other researchers have similarly acknowledged the importance of a harm reduction message, particularly for individuals already using cannabis (Butters, 2004; Coggans, Dalgarno, Johnson, & Shewan, 2004). Given that many CTP users were using cannabis along with their prescribed medications for their chronic conditions, facilitating conversations between CTP users and health care professionals is crucial. The lack of guidance from physicians may be related to a reluctance to discuss CTP because they feel illinformed, unsupported by licensing bodies, and concerned about the potential risks of cannabis use (Canadian Medical Protective Association, 2001; College of Physicians and Surgeons of British Columbia, 2009). Furthermore, when patients are seeing positive effects of CTP, physicians' adherence to messages that cannabis is not therapeutic undermines helpful patient–provider communication. Ready access to reliable information about CTP, therefore, could facilitate these discussions.

One way to increase receptivity of health messages related to using CTP is to draw on the experiences of compassion centers in addressing the information needs of CTP users (Capler & Lucas, 2006), the "personal cannabis rules" originally described by Coggans and colleagues (2004), and the information provided by the participants in this study. On the basis of this, particularly relevant information for CTP users includes (1) how to safely titrate dosage, (2) how to manage potential health risks, (3) how to assess for dependency, and (4) the importance of communicating to one's primary care provider changes in conventional treatment protocols as a result of cannabis use. As evidence related to the health effects of cannabis in the treatment and management of select illnesses emerges, harm reduction messages will need to be balanced with information regarding the potential health benefits of cannabis to support informed decision making. Additionally, many CTP users are likely to be frail and/or disabled when they make the decision to use CTP. Tailoring these resources to address the influence of health problems in addition to gender differences on patterns of CTP use is also likely to be important.

The findings of this study need to be considered in light of several limitations. While every attempt was made to include a variety of CTP experiences, the results may not

represent the full range of possible experiences among CTP users. Furthermore, this study was conducted in a region well known for its illicit production of the cannabis and greater acceptance of cannabis use and support for its decriminalization than the rest of Canada (Stockwell et al., 2004). Nevertheless, the results include important insights regarding perceptions of the health effects of cannabis use among CTP users.

CONCLUSION

This study adds to an emergent body of research by giving voice to women's and men's experiences of using CTP. Such insights are essential to understanding why CTP is utilized, what benefits and risks are perceived to be associated with CTP, and how public health messages need to be framed to best meet the needs and contextual realities of potential and current users. Further research is needed, however, to determine how assessments of the health effects of CTP use may change over time and in different and shifting social and legal environments. Additionally, the influence of gender in patterns of the use of CTP warrants further study and suggests new directions for developing information resources and providing decision support.

Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

RÉSUMÉ

Cette étude qualitative a pour but de comprendre de quelle façon les individus disant faire usage de cannabis à des fins thérapeutiques perçoivent les effets de celle-ci sur leur santé. Les données provenant de 23 entretiens individuels ont été retranscrites et analysées. Une approche orientée selon l'identité et les genres a été utilisée dans l'exploration de données et lors de l'interprétation des différences perceptuelles. Les effets bénéfiques perçus sur la santé recensés comprennent l'usage comme moyen de préservation du bien-être, comme traitement médical, comme médicament pour l'esprit, comme outil d'autogestion et enfin, comme moyen de gérer sa dépendance. Par ailleurs, l'autogestion des risques semble se concentrer principalement sur les effets néfastes possibles dus à un usage excessif, à l'inhalation de fumée ou encore aux risques liés à l'achat de cannabis. Bien que les données des sujets masculins et féminins soient similaires à plusieurs égards, il semble qu'il y ait une différence significative quant aux modes et aux pratiques d'usage selon le sexe du sujet. Cette étude permet de nous donner un aperçu quant aux nouvelles façons de développer des supports informatifs plus sensibles au genre, ceci afin de mieux orienter les prises de décisions et l'usage de cannabis à des fins thérapeutiques auprès des usagers.

RESUMEN

Efectos sobre la salud por el uso de mariguana con fines terapéuticos: Un análisis de género de las perspectivas de los consumidores

El propósito de este estudio cualitativo es el de describir como los individuos quienes dicen usar mariguana con fines terapéuticos perciben los efectos sobre la salud que esto trae. Los datos de 23 entrevistas individuales fueron transcritos y analizados. La comprensión de los roles de género e identidad fueron usados para explorar los datos e interpretar las diferencias en percepción. Las descripciones de los beneficios de usar la mariguana con fines terapéuticos incluyen al cannabis como un preservador de vida, una terapia para enfermedades, una medicina de la mente, un medio de autocontrol y una manera de manejar la adicción. El automanejo de los riesgos fue centrado en los efectos potenciales del uso excesivo, riesgos relacionados con fumar y precauciones de compra. Aunque los reportes de hombres y mujeres fueron similares en varios respectos, hubo importantes diferencias en los patrones y prácticas de uso que reflejaron influencias de género. Estadísticas del estudio proveen dirección para el desarrollo de información específica en cuanto a género para apoyar la toma de decisiones y uso de quienes consumen mariguana con fines terapéuticos.

L'usage du cannabis à des fins thérapeutiques et ses impacts sur la santé: une perception différenciée selon le sexe de l'usager

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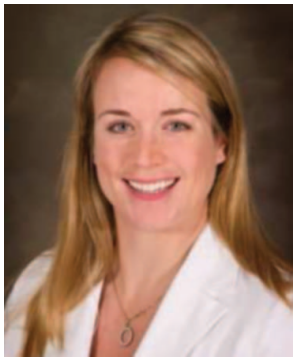

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GLOSSARY

Cannabis for therapeutic purposes (CTP): Also known as "medical marijuana," where a licensed physician has determined that an individual's health would be improved by the use of cannabis in the treatment of HIV/AIDS, cancer, anorexia, chronic pain, neurological disorders, or any other illnesses for which cannabis is probable to provide relief.

Compassion center: Also known as a "compassion club," a nonprofit, community-based cannabis dispensary that sells cannabis and cannabis-based products as therapeutic aids to members in defiance of antidrug laws.

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