BEGINNING A CONVERSATION WITH ADULT PSYCHIATRIC CLIENTS ABOUT MARIJUANA USE

BY

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CLIENTS ABOUT MARIJUANA USE

Abstract

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May 2013

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The purpose of this paper is to demonstrate how the Screening, Brief Intervention, and Referral to Treatment (SBIRT) method could be adapted by a Psychiatric Mental Health Nurse Practitioner (PMHNP) to begin a conversation with an adult psychiatric client about marijuana use. The SBIRT method involves using a standard screening tool to assess for drug use and then using the information from the assessment to have a conversation with clients about the risks associated with their drug use. Peplau's theory of interpersonal relations is discussed as the foundation for establishing a therapeutic relationship with a client in order to discuss a personal issue such as marijuana use. The limitations of the SBIRT approach will be reviewed and areas of discrepancy in the literature, with regard to marijuana, will be presented.

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This master project is dedicated to my husband and children

who made sacrifices on my behalf so I could pursue my goal.

Beginning a Conversation with Adult Psychiatric Clients about Marijuana Use

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Abstract

The purpose of this paper is to demonstrate how the Screening, Brief Intervention, and Referral to Treatment (SBIRT) method could be adapted by a Psychiatric Mental Health Nurse Practitioner (PMHNP) to begin a conversation with an adult psychiatric client about marijuana use. The SBIRT method involves using a standard screening tool to assess for drug use and then using the information from the assessment to have a conversation with clients about the risks associated with their drug use. Peplau's theory of interpersonal relations is discussed as the foundation for establishing a therapeutic relationship with a client in order to discuss a personal issue such as marijuana use. The limitations of the SBIRT approach will be reviewed and areas of discrepancy in the literature, with regard to marijuana, will be presented.

Beginning a Conversation with Adult Psychiatric Clients about Marijuana Use

Introduction

Marijuana is the most frequently used illicit drug in the United States (Compton, Thomas, Stinson, & Grant, 2007). On the National Survey on Drug Use and Health completed in 2009, it was reported that 16.7 million people age 12 or older in the United States were current marijuana users (Substance Abuse and Mental Health Services Administration (SAMHSA), 2012). Mental health clients have higher rates of substance use than individuals with no documented psychiatric history (Macleod, 2007; Martins, 2011; SAMHSA, 2012). It has been determined that 25.8% of the people using illicit drugs also have a mental illness (SAMHSA, 2012).

Substance use worsens the course of a psychiatric illness and complicates treatment (Di Forti, Morrison, Butt, & Murray, 2007; Drewe, Drewe, & Riecher-Rossler, 2004; Macleod & Hickman, 2010; Zammit et al., 2008). Because psychiatric clients often use marijuana and drug use leads to poorer mental health treatment outcomes, a PMHNP must have a method for assessing each client for drug use and for talking with clients about the risks of marijuana use.

An approach referred to as Screening, Brief Intervention, and Referral to Treatment (SBIRT) was developed in the 1960's to provide a process for assessing and providing brief intervention for clients using alcohol (Madras et al., 2009). The SBIRT method is effective at identifying individuals with alcohol abuse issues and assisting them in changing their alcohol use (Agerwala & McCance-Katz, 2012; Bertholet, Daeppen, Wietlisbach, Fleming, & Burnand, 2005; D'Onofrio & Degutis, 2002; Kaner et al., 2009; Madras et al., 2009). Researchers are finding that SBIRT is also an effective approach to addressing drug use (Copeland, Swift, Roffman, & Stephens, 2001; Humeniuk et al., 2011; Stephens, Roffman, & Curtin, 2000). The

purpose of this paper is to discuss how SBIRT could be adapted by a PMHNP to begin a conversation with adult psychiatric clients about marijuana use.

Peplau's theory of interpersonal relations is discussed as the foundation for establishing a therapeutic relationship with a client in order to discuss a personal issue such as marijuana use. Basic information about marijuana will be reviewed including reasons why clients use marijuana, the psychoactive properties of marijuana, and the particular risks associated with marijuana use for clients with mental health issues. The stages of change proposed by Prachaska and DiClemente are reviewed to help the nurse determine the client's readiness to engage in a conversation about marijuana use. Next, the steps to incorporating the SBIRT process into a PMHNP's daily practice will be outlined, including assessment tactics for gathering information on marijuana use, how to utilize the assessment information to provide a brief intervention, and how to evaluate the outcome of the SBIRT discussion. Finally, the limitations of the SBIRT approach will be discussed and areas of discrepancy in the literature with regard to marijuana will be presented.

Literature Search Strategies

A comprehensive literature search was conducted. Databases included Cumulative Index to Nursing and Allied Health, Cochrane Library, and PubMed. Search terms used to research the literature about this topic were *Peplau, interpersonal relations, SBIRT, cannabis, marijuana, medication education, patient education, ASSIST, CUDIT-R, CRAFFT, stages of change, polysubstance abuse, transtheoretical model, and medical decision making*. Bibliographies were hand searched for additional relevant references to clarify the various topics discussed in this paper.

Peplau's Theory of Interpersonal Relations

Forming an interpersonal relationship with a client is integral to establishing a therapeutic relationship that includes eliciting information about substance use issues and other sensitive issues that might be affecting a client's mental and physical health. Peplau's theory of interpersonal relations provides a framework for the nurse in understanding the components of the relationship and how to develop a therapeutic relationship with a client (Marchese, 2006; Peplau, 1997). The theory proposes that a client and the nurse move through phases when working together on treatment issues – the orientation phase, the working phase, and the termination phase (McCarthy & Aquino-Russell, 2009; Pearson, 2008; Peplau, 1997) Figure 1 illustrates the multitude of factors that influence the interpersonal relationship.

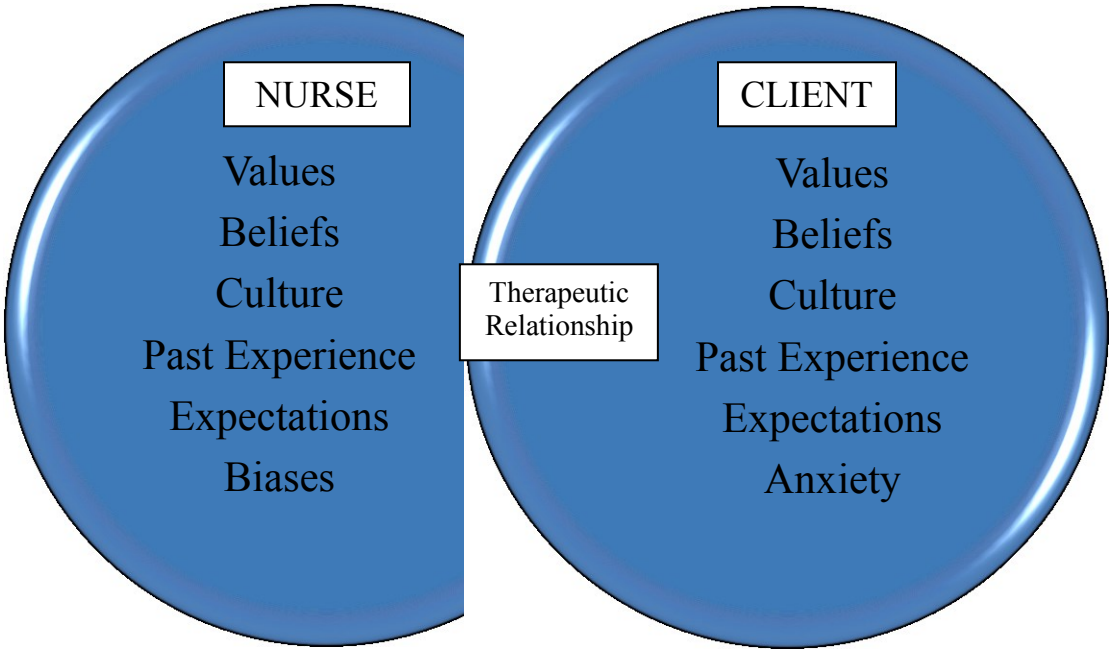

Figure 1. These are the elements within the nurse and client that influence and shape the therapeutic relationship. These factors affect how the nurse and client relate to one another and what results from the interaction. Adapted from Current Nursing, 2012.

Part of the interpersonal theory of nursing is the nurse developing an awareness of his or her own theories, biases, or opinions to identify potential countertransference issues. In this case, an important first step to building an effective relationship with the client, is a self-assessment by the nurse to examine any biases about the use of marijuana and the users of marijuana. From this self-assessment the nurse can become more aware of the messages communicated to clients about marijuana use and the willingness he or she has to discuss issues related to marijuana use (McCarthy & Aquino-Russell, 2009; Peplau, 1997).

Practitioners might not discuss marijuana use with clients because they feel clients are uncomfortable talking about substance use issues or the nurse might be uncomfortable with the discussion because of his or her own personal bias (Marshall et al., 2012). All practitioners have biases. The awareness of what those biases are is how the practitioner keeps the bias from negatively affecting the therapeutic relationship or the need of a client to address a sensitive issue, such as marijuana use. Another bias is that it is pointless to discuss marijuana use with clients because they are not going to change anyway (Amaral-Sabadini, Saitz, & Souza-Formigoni, 2010; Johnson, Booth, & Johnson, 2005). Clients do want their treatment providers to take an interest in their drug use and this attention helps clients make changes in their lives (Marshall et al., 2012).

A part of the nurse's self-assessment includes awareness and understanding of the current social climate that exists around the use of marijuana. In several states the use of marijuana for medical purposes is legal, and Washington State and Colorado passed initiatives allowing for the regulation, sale, and taxation of marijuana for individuals over the age of 21 years old (Cerdá, Wall, Keyes, Galea, & Hasin, 2012). This change in society's view of marijuana will change nursing and medical practice. With the greater availability of marijuana, using the drug may be

seen as safer and there may be less disapproval of the use of marijuana (Cerdá et al., 2012). The combination of greater availability and positive views of marijuana can lead to greater use of marijuana (Joffe & Yancy, 2004). Many people think that marijuana is a harmless, non-addicting substance (Bostwick, 2012). Legalizing marijuana adds further credence to the idea that marijuana is safe to use with no adverse side effects. Nurses need to understand and explore these issues to remain current on helping and supporting clients and communities at large adjust to the increased availability of marijuana and the changing views of marijuana use.

To fully understand the interpersonal nature of a conversation about marijuana use it is helpful to examine the reasons why people use marijuana. Examining the reasons individuals use marijuana, also helps the nurse comprehend the complexity of drug use and address any bias the nurse might have about drug use. Understanding that there are many reasons why people use drugs helps dispel the notion that drugs are used because people are deficit in some way or are only interested in getting "high". The reality is that people are using marijuana for many different reasons. A discussion of some of the personal, social, and biological reasons that people use marijuana follows.

Reasons People Use Marijuana

Personal Reasons

Marijuana is regularly used by individuals with or without psychiatric issues to manage stress, pain, sleep disturbance, and to cope with mental health symptoms such as anxiety, depression, or psychosis (Napchan, Buse, & Loder, 2011; Van Dam, Bedi, & Earleywine, 2012). Individuals also use marijuana to cope with feelings, problems, or situations. This has sometimes been termed as "self-medicating" to relieve suffering whether it is physical or emotional. Some individuals like to use marijuana because they feel it is a "natural medicine"

that helps with mental or physical health problems or reduces side effects from other medications they are taking (Machielsen et al., 2012; Saddichha, Prakash, Sinha, & Khess, 2010).

Social Reasons

Individuals also use marijuana for acceptance or approval from their social group or peers (Cerdá et al., 2012; Saddichha et al., 2010). In this way marijuana is like alcohol, helping a user relax, feel less self-conscious, and more at ease in a social gathering (Beck et al., 2009; Bostwick, 2012). Many people who use marijuana also have social anxiety and feel like outcasts (Buckner, Joiner, Schmidt, & Zvolensky, 2012). If a person has favorable beliefs about marijuana, and others in the community support these beliefs, he or she is more likely to choose to use marijuana (Cerdá et al., 2012; Peat, 2010).

Individuals sometimes report that they use marijuana because they are bored and this gives them something to do. Individuals also use marijuana for fun or to "get high" (Bostwick, 2012). Recreational users of marijuana often use more of the drug because they want to get intoxicated. Someone that is looking for relief from medical symptoms usually takes only the amount that is needed to manage to the symptoms (Bostwick, 2012).

Biological Reasons

There are strong genetic and biological factors that may increase the use of marijuana in mental health clients. Researchers found that some individuals with and without mental health disorders have fewer D2 dopamine receptors (Di Forti, 2007). The dopamine system in the body is responsible for the reward the person gets from using marijuana (Cooper & Haney, 2009). If there are fewer receptors it takes more of the drug to get the reward by increasing dopamine2. Increasing the amount of drug ingested raises the risk for dependence on the drug and also increases the risk of side effects from the marijuana (D'Souza et al., 2005).

Researchers also speculate that individuals with schizophrenia might have dysfunctional cannabinoid receptors or a gene mutation that makes them more susceptible to the psychotic effects from using marijuana (D'Souza et al., 2005; Ho, Wassink, Ziebell, & Andreasen, 2011). Since the cannabinoid (CB1) receptors are widely distributed throughout the brain it follows that individuals with receptor problems would be more likely to desire using a substance that provides brain stimulation for them. Drug use is reinforcing so once it begins drug use continues unless there are other compelling reasons for no longer using (Bostwick, 2012; Cooper & Haney, 2009).

Many individuals who use marijuana are also users or have been users of other mind altering substances. Polysubstance abuse, which is the use of at least three groups of substances (not including caffeine or nicotine) during the same 12 months period, is common among substance users (Hakansson, Schlyter, & Berglund, 2011). Sometimes these individuals use marijuana instead of the other substances they used to abuse because marijuana is seen as a safer less detrimental drug (Bostwick, 2012).

In order for the nurse to talk about marijuana in an informed manner it is helpful to understand the psychoactive properties of the drug. Marijuana, like many drugs, is made up of chemicals that cause effects in the body and the brain. Marijuana has been associated with an exacerbation of mental health issues. Reviewing the psychoactive properties of marijuana helps the nurse establish a knowledge base about marijuana, which, as Peplau suggests, is important for working effectively with a client on addressing marijuana use issues (1997). A discussion of some of the major psychoactive properties of marijuana and the effects related to mental illness follows.

Marijuana's Psychoactive Properties

The psychoactive ingredient in marijuana that leads to the euphoria and most of the unwanted side effects of marijuana is delta9-tetrahydrocannabinol (THC). Of interest, is the fact that most of the marijuana available in the street market is cultivated with the goal of achieving more intense euphoria. The average THC content in street market marijuana has increased from 2% in 1980 to 8.5% in 2006 (Bostwick, 2012; Hall & Degenhardt 2009; McLaren, Swift, Dillon, & Allsop, 2008; Office of National Drug Control Policy (ONDCP), 2010). This higher level of THC in street market marijuana means there is a greater likelihood of unwanted side effects with use such as altered perception, dizziness, disorientation, dysphoria, anxiety, panic, and psychosis (Morgan et al., 2012).

Higher concentrations of THC increase the risk of addiction to marijuana. For users of marijuana, the lifetime risk for becoming dependent on the drug is 9% (Bostwick, 2012). Researchers have found that a withdrawal syndrome exists for chronic users that includes symptoms of irritability, anxiety, anorexia, weight loss, restlessness, problems with sleep, and craving for the drug (Budney, Hughes, Moore, & Vandrey, 2004; Haney, 2005; Vandrey, Budney, Kamon, & Stanger, 2005). The withdrawal syndrome takes several days to develop so often marijuana users do not associate the withdrawal symptoms with their discontinuation of the drug (Cooper & Haney, 2008). A marijuana user will frequently start smoking again to relieve withdrawal symptoms. Experiencing withdrawal symptoms when trying to quit using a drug makes it difficult to achieve and maintain abstinence from the drug (Bonn-Miller & Moos, 2009; Cooper & Haney, 2009).

Cannabidiol (CBD) is the component in marijuana that leads to the beneficial effects of marijuana. CBD shows promise in providing neuroprotective benefits, anti-inflammatory

properties, and having potential anti-psychotic or antianxiety properties (Harvard Medical School, 2010). Unfortunately, the CBD levels in street market marijuana vary significantly from almost 0% to up to 40 % in some varieties (Morgan et al., 2012). Clients should be informed about the potential for contamination and the variability in effect whenever ingesting a street drug that is not monitored or controlled by the Food and Drug Administration (McLaren et al., 2008). It is this variability that makes it difficult to ascertain if street market marijuana will deliver any beneficial health effects or mostly increase an individual's health risks.

CBD and THC interact at the cannabinoid CB1 receptors which are found thorough-out the body -- in the central nervous system, autonomic nervous system, immune system, gastrointestinal tract, reproductive system, cardiovascular system, and endocrine pathways (Malone, Hill, & Rubino, 2010). In the brain, the cannabinoid receptors develop slowly reaching their maximum levels during adolescence (Malone et al., 2010). The receptors are concentrated in the executive functioning areas of the brain which are responsible for reward feedback, learning, recall, and memory (D'Souza et al., 2005; Gruber, Sagar, Dahlgren, Racine, & Lukas, 2012; Ho et al., 2011).

This wide distribution of cannabinoid receptors explains the numerous potential side effects and potential benefits of marijuana. There are receptors in the cerebellum and basal ganglia that when stimulated by marijuana result in impaired coordination. The receptors in the hippocampus relate to the mood effects reported by marijuana users and problems associated with short-term memory, learning, and problem solving (Bostwick, 2012). The receptors in the prefrontal cortex relate to the changes in concentration, memory, attention, and tracking. Hypothalamus stimulation results in appetite stimulation. Receptors are absent in the brainstem which means marijuana is not a drug that can be overdosed on (Bostwick, 2012).

The information about the psychoactive properties of marijuana can be condensed into several major points to be included in the discussion about marijuana use with a client. It is important to highlight the correlation between higher levels of THC in street market marijuana with a greater risk for side effects and dependence with marijuana use. Clients can be advised of the symptoms related to the withdrawal syndrome from marijuana discontinuation. The discussion should also include how marijuana use stimulates cannabinoid receptors in the brain which results in appetite stimulation, coordination problems, and problems with memory, learning, attention, and problem solving.

Marijuana Effects Associated With Mental Illness

Of particular relevance to psychiatric clients, marijuana has been found to increase hospitalization risk by 1.6 times with incidental users and 6.2 times with heavy users (Schubart et al., 2011). Marijuana use has also been associated with a worse course of a psychiatric illness (Drewe et al., 2004; Macleod & Hickman, 2010; Moore et al., 2007). The increased risk of hospitalization and poorer prognosis, for individuals with mental illness, may be related to the increase in psychiatric symptoms associated with marijuana use.

Affective issues. Marijuana use has been found to be associated with higher rates of depression and anxiety (Cheung et al., 2010; Drewe et al., 2004; Harder, Stuart, & Anthony, 2008; Zvolensky, Cougle, Johnson, Bonn-Miller, & Bernstein, 2010). Cheung and associates examined data from the Centre for Addiction and Mental Health Monitor Survey (CAMH) and found an association between marijuana use and symptoms of anxiety and mood disorders (2010). CAMH conducted random telephone surveys of 14,531 adults living in Ontario. Survey participants provided self-report information on their marijuana use patterns and symptoms of anxiety and mood disorders. Upon analyzing this information, Cheung and associates found that

heavy users of marijuana (as measured by the AUDIT) were twice as likely as non-users to report symptoms of anxiety and mood disorders (2010).

Similarly, Zvolensky and colleagues found that the use of marijuana was associated with an increased risk for panic attacks (2010). Their study included 5,672 individuals from the United States of which 53% were women with a mean age of 45. Personal interviews were conducted to collect the information using the World Health Organization Composite International Diagnostic Interview. This is a valid and reliable tool for gathering information on anxiety, mood, and substance use disorders.

Psychosis. Several researchers have studied the correlation between marijuana use and the exacerbated course of illness for clients with schizophrenia or other thought disorders (Drewe et al., 2004; Foti, Kotov, Guey, & Bromet, 2010; Malone et al., 2010; Moore et al., 2007; Zammit et al., 2008). Zammit et al. completed a systematic review of 13 research studies to examine if marijuana use does worsen the course of illness for clients with psychotic symptoms (2008). They found that the use of marijuana was associated with an increase in psychiatric hospitalization and reduced success from mental health treatment. Other researchers have found that a link between using marijuana in the early teenage years may contribute to an increased risk of developing a psychotic disorder in the future (Large, Sharma, Compton, Slade, & Nielssen, 2011; Malone et al., 2010; Moore et al., 2007).

Even though marijuana has been associated with increased symptoms of schizophrenia it is one of the drugs most often used by individuals with or without schizophrenia (Koskinen, Löhönen, Koponen, Isohanni, & Miettunen, 2010; McMillan, Enns, Cox, & Sareen, 2009). D'Souza et al. researched the effects of THC on individuals with schizophrenia with a randomized, double-blind, placebo-controlled study (2005). Subjects were diagnosed with

schizophrenia from an interview based on the DSM-IV and a chart review. The study included clinically stable individuals that had used marijuana at least once but were not abusing or dependent on marijuana or other substances, except nicotine. Subjects were ask not to take any substances during the study period and were tested daily for any use of caffeine, alcohol, or other drugs. Subjects took their psychotropic medications. Prior to the testing, baseline laboratory data, physical and neurological assessment data, including an electrocardiogram, were gathered on the subjects.

Over three days, D'Souza et al. administered 0 mg, 2.5 mg, and 5 mg of THC intravenously to 22 individuals without schizophrenia and 13 individuals with schizophrenia. There was one week between test days to allow for elimination of the THC before the next dose was tested. The doses of THC were chosen because these amounts correlate to the quantity of THC ingested when smoking cannabis (D'Souza et al., 2005). Thirty minutes after administration of the THC, researchers tested the participants' cognitive, motor, and behavioral abilities, prolactin, and cortisol levels. They found that the intravenous THC worsened the positive and negative symptoms of schizophrenia, increased cognitive deficits, increased psychosis briefly, elevated prolactin and cortisol levels, and exacerbated medication side effects, such as akathesia or Parkinsonian movements, without providing any benefit. The THC created more problems with learning and memory for the schizophrenic subjects (D'Souza et al., 2005).

During the conversation about the risks of marijuana, the nurse can underscore the marijuana effects that are associated with mental illness. It can be included in the discussion that marijuana use has been associated with an increased risk of hospitalization and a poorer prognosis for individuals with mental health problems. Additionally, some researchers have found that marijuana use is associated with higher rates of anxiety, depression, and panic attacks

for individuals with mental illness. Another important point to share is that researchers have found an association between marijuana and an escalation in mental health symptoms.

Relevant Health Effects of Marijuana

Respiratory. Marijuana is used in different ways but it is typically smoked (McGuiness, 2009). When marijuana is smoked it carries the same respiratory risks as cigarettes. The marijuana cigarette contains tar and carcinogens that are damaging to lung tissue (Taskin, 2005; Reece, 2009). Regular smoking of marijuana raises an individual's risk for respiratory infections, coughs, asthma, bronchitis, and lung cancer (Aldington et al., 2007; Aldington et al., 2008; McGuiness, 2009; Moore, Augustson, Moser, & Budney, 2005; Reece, 2009).

Obesity. Because of marijuana's actions in the hypothalamus it acts as an appetite stimulant. In some clients this can contribute to weight gain and obesity. Many clients already struggle with this issue due to the weight gain effects of many psychotropic medications. The unfortunate repercussions of obesity are a greater risk of metabolic disorders such as dyslipidemia, diabetes mellitus, hypertension, and increased cardiovascular risks (McGuiness, 2009; Pack, 2009).

For the PMHNP to reference, a basic overview of the side effects and actions of marijuana are covered in Appendix A and a marijuana fact sheet is presented in Appendix B. After the nurse reflects on any personal bias associated with marijuana use and develops a knowledge base about the reasons individuals use marijuana, the psychoactive properties of marijuana, and the particular risks of marijuana use for clients with mental health issues, the nurse is ready to start the process of assessing clients for marijuana use. According to Peplau, the place for the nurse to assess for marijuana use, is the orientation phase of the therapeutic

relationship (1997). A discussion of the orientation phase of the interpersonal relationship follows.

Orientation Phase of the Interpersonal Relationship

The orientation phase of the interpersonal relationship starts with introductions, an explanation of the nurse's role, the purpose of the appointment, and the time allotted for the meeting (McCarthy & Aquino-Russell, 2009; Peplau, 1997). The nurse and the client begin the relationship as strangers but with the development of trust and understanding the partnership evolves to one that can encourage growth and change (Douglass, Sowell, & Phillips, 2003). During the orientation phase, the nurse gathers information about client health issues including marijuana use. A complete assessment of the client's situation and needs, including drug use, takes place at this time. This is the time to put the client at ease and create an environment of interest and acceptance that allows for an open exchange between the nurse and client. During this phase, the nurse listens and tries to understand the client's concerns and needs (McCarthy & Aquino-Russell, 2009; Peplau, 1997). The focus is on the person and not the problem.

Often, the assessment of a mental health client's needs takes the entire first session or several sessions, as assessment is an ongoing process in the therapeutic relationship. Therefore, the PMHNP must choose when the time is right to implement the SBIRT process. If the client has come to the appointment specifically to address substance abuse issues then the SBIRT process can occur during that visit. If the client has come for other reasons, it will likely be at a later appointment that the client is ready to discuss substance use issues. It is helpful to develop trust in the relationship before beginning to address substance use issues through the SBIRT process (Douglass et al., 2003; McCarthy & Aquino-Russell, 2009; Peplau, 1997).

Stages of Change

To determine how ready a client is to discuss substance abuse issues, the PMHNP can employ the six stages of change proposed by Prachaska and DiClemente (Hansen, Ganley, & Carlucci, 2008; Woody, DeCristofaro, & Carlton, 2008). According to Prachaska and DiClemente,

1. The first stage of change is pre-contemplation where the individual is not considering changing his or her marijuana use. A client in this stage of change might be unwilling to participate in the SBIRT process.
2. The second stage is the contemplation stage where a client is thinking about changing marijuana use but there is ambivalence to making this change. At this stage, SBIRT can be used to help clients understand the risks associated with their level of marijuana use.
3. The third stage involves planning. In this stage, the client has decided to make a change in marijuana use and the PMHNP can offer support in developing plans to make that change.
4. The fourth stage is action where the client implements the plan for changing marijuana use. The action plan may include going for specialized substance abuse treatment, attending support groups such as AA or NA, or simply developing a quit plan.
5. The fifth stage is the maintenance stage where the client continues working on maintaining marijuana abstinence. Relapse is a normal part of substance abuse and often occurs during this stage. Relapse can be helpful for the client in designing a better plan for long-term change.

6. The sixth stage is termination when the person continues with the plan for maintaining abstinence but no longer feels tempted to use marijuana again and is unlikely to relapse (Hansen et al., 2008; Woody et al., 2008).

Understanding where a client is in the stages of change helps the PMHNP to know when and how to intervene with a client about substance abuse. It is unlikely that someone in the pre-contemplation stage will be open to addressing marijuana use even though the practitioner may want this (Hansen et al., 2008; Woody et al., 2008). A person, in the pre-contemplation stage, is unconscious of any idea about change and will likely resist any discussion about marijuana use and the risks associated with use. A topic broached in the pre-contemplation phase is likely to elicit resistance. When the client enters the contemplation stage then the PMHNP can implement the SBIRT process. An overview of the SBIRT process follows.

Screening, Brief Intervention and Referral to Treatment

The SBIRT method was developed in the 1960's as a public health approach to addressing substance abuse issues. The SBIRT method was created to assess all individuals seeking medical treatment for substance use and to deliver brief intervention to at-risk screened individuals (Agerwala, & McCance-Katz, 2012; Madras et al., 2009). By administering substance use screening to all clients seeking treatment, potential substance abuse problems are not overlooked. SBIRT was originally devised to work with clients on changing their alcohol use. However, researchers have found that SBIRT is also effective at addressing a client's marijuana usage (Copeland et al., 2001; Humeniuk et al., 2011; Stephens et al., 2000).

A benefit of the SBIRT model is that it can be implemented in a non-substance abuse treatment setting like a PMHNP's office or a community mental health center (Agerwala, & McCance-Katz, 2012). The SBIRT method takes roughly 15 minutes to implement and a nurse

does not have to be an expert on substance abuse treatment to employ the method (Bertholet et al., 2005; Ong-Flaherty, 2012).

A goal of using an SBIRT assessment is to identify a client's marijuana use early in treatment. Having concrete assessment information to discuss also creates an opportunity for the nurse to provide feedback to clients on their marijuana use and to raise awareness of the problems associated with marijuana use. The SBIRT type of assessment and feedback process has been found to prevent clients from developing future marijuana use problems, has resulted in clients altering their current use patterns, and has resulted in clients seeking further substance abuse treatment before the problem becomes more serious (Copeland et al., 2001; Humeniuk et al., 2011; Kaner et al., 2009; Stephens et al., 2000).

Assessment Options

The initial step in the SBIRT process is screening an individual for substance use. This paper is focusing on marijuana use but a PMHNP would screen for all substances a client uses. During the orientation phase of treatment, an assessment tool is used to gather information about the client's marijuana use and other drug use (Agerwala & McCance-Katz, 2012). A self-report screening for drug use can be administered before or during an appointment. There are several screening tools available for assessing marijuana use – the ASSIST, the CUDIT-R, or the CRAFFT (Adamson et al., 2010; Hides et al., 2009; Humeniuk et al., 2008; Knight, Sherritt, Shrier, Harris, & Chang, 2002). See Appendix C, SBIRT screening tools, for a summary of the questions asked on these screening tools. Using an assessment tool to gather information, allows the nurse to provide non-judgmental feedback to the client about their drug use based on the information the client provides on the self-report screening.

If the clinician uses the ASSIST screening tool all the materials for carrying out a brief screening and intervention are available from the World Health Organization (WHO) and the National Institute of Drug Abuse free of charge (2013). This includes the ASSIST assessment tool, the criteria for scoring the assessment, and a ten-step brief intervention tool mapping out how to talk with a client about the information that was provided on the ASSIST questionnaire. See Appendix D, WHO 2013 Assist feedback report card, for information on the ASSIST risk scoring and the ten-step ASSIST brief intervention.

After the client is assessed for marijuana use and the client is in a stage of readiness, the time is right for the nurse and adult psychiatric client to begin a conversation and mutual exploration of client marijuana use. The conversation begins with the information gathered from the SBIRT assessment and occurs during the working phase of the therapeutic relationship. A discussion of the working phase of the interpersonal relationship follows.

Working Phase of the Interpersonal Relationship

During the working phase of the relationship, the client begins to feel comfortable enough to share information about what he or she would like help with (Peplau, 1997). In this stage, the focus is on how the client is affected by an issue, say marijuana use, and the readiness to work on the issue (McCarthy & Aquino-Russell, 2009). It is at this time, in the relationship, that the nurse shares the information gathered during an SBIRT assessment and helps a client understand the risks associated with this level of marijuana use. It is recognized that the client must decide how to use the information that is provided. The client is the architect in developing a plan that addresses marijuana use (Marchese, 2006). The idea is for the nurse to grapple with the issue of the client's marijuana use and not the client. Interpersonal communication is about

respecting the client and not discussing an issue in a way that makes the client feel ashamed or defensive about the topic.

Rather than focusing on the client making the decision that the practitioner would like made about marijuana use, the focus is on providing the best information to help the client make an informed decision about marijuana use. It has been shown that a mutual approach to decision making improves the therapeutic relationship with the client, leads to better outcomes from treatment, reduces drug use, and the severity of psychiatric symptoms (Adams & Drake, 2006; Joosten et al., 2008; Joosten, de Jong, de Weert-van Oene, Sensky, & van der Staak, 2009; Koivunen et al., 2012; Mahone et al., 2011; Wills, 2010).

During the working phase, an effective way to start a conversation with a client about marijuana use is to provide brief intervention using the SBIRT method. A discussion of the SBIRT brief intervention process follows.

The Brief Intervention Process

During the working phase of the relationship, the nurse provides the brief substance use intervention. The brief intervention is designed to help clients increase their insight and awareness about the risks related to their marijuana use (Agerwala & McCance-Katz, 2012). As Peplau suggests, during the working phase, the nurse adopts an attitude of understanding and acceptance. The skills of active listening and empathy are employed and a warm, encouraging approach is adopted rather than one that is confrontational (Peplau, 1997). The information gathered from the client is used to implement the brief intervention part of the SBIRT process. The client merely receives feedback on the marijuana risk score and what this means in relation to health risks and other risks. The client is then advised that he or she can reduce the risks from

marijuana use by changing marijuana use (Agerwala & McCance-Katz, 2012; Bernstein et al., 2009; Humeniuk et al., 2011).

What clients do with the information provided is up to them. If resistance and defensiveness are low, the client can be asked about any concerns about marijuana use, what is good about using marijuana, and what is less positive about using marijuana. The process ends with the nurse summarizing and reflecting back the client's discussion of his or her marijuana use (Agerwala & McCance-Katz, 2012; Bernstein et al., 2009; Humeniuk et al., 2011). See Appendix D for information on the ASSIST feedback report card and a 10-step intervention plan.

Intervention Associated With Risk Score

The level of brief intervention the client needs is based on the score the individual receives on the substance use assessment scale (Bernstein et al., 2009). The client may receive a low, moderate, or high risk score depending on their answers on the substance abuse questionnaire. With the SBIRT method, all clients are given feedback on the risks of marijuana use. Moderate or high risk users are also given referrals for additional substance abuse treatment (Humeniuk et al., 2011).

The individual's risk score provides an opportunity for the nurse to begin a conversation with a client about marijuana use. Because the risk score is based on information provided by the client, the risk score offers a way to intervene with the client about their marijuana use in a non-judgmental supportive manner.

After the intervention, the client is given a self-help booklet containing information on strategies for cutting down or stopping substance use. See Appendix E, Appendix F, Appendix G, and Appendix H for a summary of the self-help booklet and the forms that are used in the self-help booklet. The client is also given the feedback card which lists the "risk score" and the

risks associated with this level of marijuana use (Agerwala & McCance-Katz, 2012; Bernstein et al., 2009; Humeniuk et al., 2011). See Appendix D for information on the ASSIST feedback report card.

If it is determined that the client needs further substance abuse treatment he or she should be assisted with making an appointment with a substance abuse treatment provider. A referral to substance abuse treatment should take place during the appointment to maximize follow-through (Cleary, Hunt, Matheson, & Walter, 2009). The PMHNP should be prepared to provide information about the costs of substance abuse treatment and which health plans cover addiction treatment. The PMHNP should describe for the client the type of treatment provided by the programs in the community whether it is cognitive behavioral therapy, 12-step, motivational enhancement therapy, inpatient, or outpatient treatment, and what type of language options are available at the programs (Cleary et al., 2009). The PMHNP can provide a fact sheet that supplies a short definition of the various treatment options. A return appointment should be scheduled to follow-up on the outcome of the referral and the outcome of the intervention (Humeniuk et al., 2011).

The SBIRT process is an effective way for a PMHNP to begin a conversation about marijuana use with the client in a non-confrontational helpful manner. The intervention concludes by giving the client take home materials including a self-help booklet containing information about reducing substance use, the feedback card about the client's marijuana use score, and information on what the score means. If the client is identified as needing more treatment they are assisted during the appointment with a referral for more specialized treatment.

The conclusion of a session or the ending of treatment is also important to the therapeutic relationship. Peplau calls this the termination phase of the interpersonal relationship (1997).

The termination phase is the place where progress on an issue is reviewed and the treatment process is evaluated. A discussion of the termination phase of the interpersonal relationship follows.

Termination Phase of the Interpersonal Relationship

At the end of treatment, the nurse provides a summary of the accomplishments achieved during the appointment, including reviewing the client's plan for action (Peplau, 1997). At this time, closure on the issues takes place and any need for follow-up is addressed (McCarthy & Aquino-Russell, 2009). This is a time for reflection on the relationship and for feedback on improving communications for future sessions. When this stage is reached the clients have been given feedback about their marijuana use and necessary supports and resources for help addressing marijuana use problems.

Evaluating the SBIRT Process

After any therapeutic session it is important to evaluate the success of the process and the amount of progress that occurred from the treatment (Nurit, Bella, Gila, & Revital, 2009). An evaluation of the SBIRT process can be done by reviewing whether the screening identified any current or potential problems the client is having with marijuana. If problems were identified, then the client should have been provided with information about the current pattern of use and the risks associated with this level of marijuana use. The client should have been advised that health and other risks can be reduced by reducing marijuana use. The client is given the responsibility to make the decision about the information provided. If needed, a follow-up is scheduled to address ongoing marijuana use issues (Humeniuk et al., 2011).

The aim of a marijuana SBIRT intervention is to identify clients with "risky use" behaviors and provide the client with non-judgmental information so that an informed choice

about marijuana use can be made. Possible outcomes from the intervention are that the client will recognize the risks associated with the marijuana use and decide to make a change in the use of marijuana. Another outcome could be that the client will demonstrate an increased understanding of the risks associated with marijuana use. Alternate or additional client goals might be an improvement in physical, psychological, or social issues related to decreased marijuana use (Nurit et al., 2009).

The interpersonal relationship between a nurse and client undergoes a metamorphosis when passing through the phases proposed by Peplau (1997). The relationship evolves from strangers to partners in order to address a client's complex needs including substance abuse issues. The PMHNP is informed by the stage of change model about when a client might be ready to begin a conversation about marijuana use. The SBIRT process provides an effective way to assess for client marijuana use and adapt the assessment information into a supportive conversation with the client about the client's marijuana use and the risks associated with marijuana use. Table 1 provides further clarification of the main concepts from Peplau's interpersonal relationship theory and how SBIRT and the stages of change fit within this framework and apply to discussing marijuana use with a client.

Table 1 ***Understanding how SBIRT & stage of change fit in the Interpersonal Relationship***

Concept	*Definition*
Relationship	A client comes to a nurse for help addressing mental health issues. The nurse has expert knowledge about the risks of marijuana use. The client is the expert on his or her life and the expert on what strategies will work for addressing marijuana use.
	Phases of the Interpersonal Relationship
Orientation Phase	Introduction of self, roles, develop rapport, assessment of needs
Stage of Change	Assess for stage of change client is in, if contemplation continue with SBIRT
SBIRT	Assess for marijuana and drug use with a client self-report assessment tool
Working Phase	Provide education, support, and counseling around marijuana use
Stage of Change	If contemplation stage, implement SBIRT brief intervention
SBIRT	Discuss client's risk score in relation to risks of using marijuana
Termination Phase	Evaluate SBIRT process, discharge planning, and closure
Stage of Change	The client is thinking about changing marijuana use
SBIRT	The clients have been provided with information about the risks associated with their level of marijuana use and advised that risks can be reduced by reducing marijuana use. The clients are given the responsibility to make the decision about the information.
Risks	Negative outcomes associated with the client's marijuana use.
Resolution	Collaborative effort between the nurse and client leading to understanding about the risks related to the client's current marijuana use pattern.
Assumptions	The relationship leads to changes in the patient's behavior. A positive relationship allows PMHNP to explore marijuana use and support the client in addressing risky use behavior.

Note. These terms and definitions were developed from works published by Douglass et al., 2003, McCarthy & Aquino-Russell, 2009, Pearson, 2008, and Peplau, 1997.

Discussion

This paper is a beginning exploration of how a PMHNP could assess an adult client for marijuana use issue, have a conversation with the client about marijuana use, and provide reference material for the client. It is possible that a client identified as having a marijuana use problem may need further intervention beyond the SBIRT process. It is also clear that a SBIRT session about marijuana use will not necessarily result in clients making a change in their marijuana use pattern because the clients may be in the pre-contemplation phase or otherwise not willing to enter into a discussion about drug use behavior. This lack of change should not discourage a PMHNP from continuing to use the SBIRT approach as a lack of change has more to do with a client's readiness to change and less to do with the effectiveness of the SBIRT method.

The SBIRT method utilizes a self-report tool to gather information about marijuana use (Agerwala & McCance-Katz, 2012). Often, clients under-report their substance use habits (Bostwick, 2012). The SBIRT method will only work if clients tell us about their marijuana use. For this reason, substance abuse issues should be assessed on an ongoing basis. A variety of assessment techniques may need to be employed to identify some substance use issues.

It is well known that clients often abuse multiple substances. Most likely it would be helpful to adapt the SBIRT approach to all substances that a client uses. The nurse would need to gather risk information on each substance to be able to provide evidenced based feedback to the client about their pattern of use for other substances. It should be noted that currently the risks from marijuana use in children and adolescents are much greater because their brains are still in the process of development (Gruber et al., 2012; Vadhan et al., 2009). When the SBIRT

approach is used with children and adolescents, the risk information provide on marijuana use reflects this greater potential for negative impacts on the developing brain.

It is likely that the SBIRT approach will not be helpful for all clients. Various cultural issues affect what information is deemed beneficial or not and what approach works with a client (Charles, Gafni, Whelan, & O' Brien, 2006; Koivunen et al., 2011). It is important that a practitioner be sensitive to cultural issues and does not see this as the only type of substance abuse approach that is helpful for clients. A sensitive approach should include modalities that the client finds helpful such as alternative treatments, leaflets, video materials, web information, or supportive groups (Koivunen et al., 2011).

SBIRT alone has been found by many researchers to decrease alcohol and cigarette use but few studies have examined whether this is true of marijuana usage. It has been difficult to do extensive human research on the effects of marijuana use because of federal restrictions on marijuana research. More research needs to be completed to verify that SBIRT is an effective way to address marijuana use with clients. Further studies are also needed to clarify the risks of marijuana use especially the risks related to individuals that have a pre-existing mental health condition (Bostwick, 2012; Peat, 2010).

The SBIRT intervention includes having the practitioner provide information to clients on safe use amounts and safe practices. Because of the poverty of research on marijuana there is little consensus on a safe use amount of marijuana like there is with alcohol use. The medical community does not have a clear message to deliver on "safe" marijuana use amounts. Additionally, most of the research has looked at the risks and side effects of street market marijuana as opposed to medical marijuana. It is unclear if there are less side effects or less risks associated with medical marijuana than street marijuana. The risks of respiratory side effects are

extensive when a client is smoking marijuana so does this mean that nurses should provide clients with information about the use of vaporizers or other delivery methods to reduce the respiratory risks of marijuana. Further research is needed to answer these questions if SBIRT is to remain a viable intervention tactic.

Conclusion

There is a compelling need to provide, for clients with mental health problems, consistent screening for marijuana use and brief information on the risks associated with marijuana use. Understanding the nature of marijuana use and the side effects associated with marijuana use provides the nurse with evidenced based information to share with the client. Standardized assessment assures that any client with a marijuana use issue is identified and helped. The SBIRT method is a consistent approach to screening all clients and to providing brief feedback to clients on the risks associated with their level of marijuana use. The stage of change a client is in informs the nurse on when to implement the SBIRT intervention.

Ultimately, the PMHNP's role is to develop a strong therapeutic alliance with a client so that substance use issues can be discussed and addressed. This involves the PMHNP doing self-reflection to understand what biases he or she might have about marijuana use and marijuana users. The PMHNP must also understand the changing culture in the United States with the legalization of marijuana for medical use and in some states for recreational use and how this will impact clients and communities.

SBIRT is a non-judgmental approach that supports the development of a positive interpersonal relationship between the client and the therapist which ultimately results in helping clients understand the risks involved with their marijuana use. It is true that the SBIRT approach may take longer than other methods and does not necessarily result in the choice that the

PMHNP may want the client to make. However, through a supportive discussion, important information is gained about the reasons a client chooses to use marijuana and a therapeutic relationship of trust is established that can ultimately lead to more health promotion activities and improved client mental health. It is the collaborative nature of the SBIRT approach that makes discussing marijuana use comfortable and puts the client firmly in charge of making the decisions on how to address any substance use issues.

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Appendix A

Risks and Benefits of Marijuana Use

Potential Side Effects	***Possible Benefits***
Sedation	Sleep Aid
Weight Gain	Increased Appetite
Altered Perception; Impaired Cognition	Pain Relief
Impaired Coordination	Decreased Nausea
Decreased Reaction Time	Decreased Intraocular Pressure
Decreased Attention	Muscle Relaxation
Dry Mouth; Dizziness	
Disorientation; Dysphoria	
Increased Heart Rate	
Anxiety; Panic Attacks	
Addiction, Dependence, and Withdrawal	
Increased Psychosis, Paranoia, Hostility (mostly individuals with Psychotic Disorders)	
Increased Mood Cycling in Bipolar Disorder	
Apathy	
Respiratory Problems – pharyngitis, rhinitis, asthma, bronchitis, emphysema, lung cancer	
Cyclic Vomiting	
Contamination from street available marijuana	
Incarceration/Legal Problems	

Note: The risks and benefits analysis reflects research done by Aldington et al., 2007; Aldington et al., 2008; Blows et al., 2005; Bostwick, 2012; Bonn-Miller & Moos, 2009; Budhraja, Narang, & Azeez, 2008; Cotter, 2009; Degenhardt & Hall, 2008; Drewe et al., 2004; Hall & Degenhardt, 2009; Harvard Medical School, 2010; McGuinness, 2009; Moore et al., 2007; Napchan et al., 2011; Peat, 2010; Reece, 2009; Vadhan et al., 2009; Wang, Collet, Shapiro, & Ware, 2008; Wilner & Arnold, 2011; Wilsey et al., 2008.

Appendix B

Marijuana Fact Sheet

- THC in marijuana causes the euphoria and most of the unwanted side effects
- THC content has increased from 2% in 1980 to 8.5% in 2006
- Cannabidiol (CBD) in marijuana leads to the beneficial effects of marijuana
- CBD levels vary from almost 0% to up to 40 % in some varieties of marijuana
- Cannabinoid receptors are found thorough-out the body
- Cerebellum/basal ganglia stimulation results in impaired coordination
- Hippocampus stimulation results in mood effects and problems with short-term memory, learning, and problem solving
- Prefrontal cortex stimulation affects concentration, memory, attention, and tracking
- Hypothalamus stimulation results in an increased appetite and possible obesity
- A withdrawal syndrome exists for chronic use that includes irritability, anxiety, anorexia, weight loss, restlessness, problems with sleep, and craving for the drug
- Lifetime risk for becoming dependent on the marijuana is 9%
- Marijuana use has been found to increase hospitalization risk by 1.6 times with incidental users and 6.2 times with heavy users
- Marijuana use is associated with higher rates of depression, anxiety, and panic attacks
- Marijuana use is associated with increased symptoms of schizophrenia
- When marijuana is smoked it carries the same respiratory risks as cigarettes

Note: Adapted from Bostwick, 2012; Budney et al., 2004; Cheung et al., 2010; D'Souza et al., 2005; Morgan et al., 2012; Reece, 2009; Schubart et al., 2011; Zammit et al., 2008; Zvolensky et al., 2010.

Appendix C

SBIRT Screening Tools

ASSIST Alcohol, Smoking, and Substance Involvement Screening Test (covers 10 substances)

Which substances have ever been used?	What is the frequency in the past 3 months (3M)?
What is the frequency of a strong urge to use in the last 3M?	What is the frequency of health, social, legal, or financial problems related to use in 3M?
What is the frequency because of use not completed what was expected in 3M?	Has anyone ever expressed concern about the use of each substance? How recently?
Have ever tried and failed to cut down or give up use? How recently?	Has the patient injected any drug?

CRAFFT (2+ yes answers positive)

Have you ever ridden in a car driven by someone who was "high" or using?	Do you ever use alcohol or drugs to relax, feel better about yourself, or fit in?
Do you ever forget things you did while using alcohol or drugs?	Do your family or friends ever tell you that you should cut down on your drinking or drug use?

Have you ever gotten into trouble while you were using alcohol or drugs?

CUDIT-R Cannabis Use Disorders Identification Test- Revised (specific for marijuana)

How often do you use cannabis?	How many hours "stoned" on a typical day?
How often "stoned" for 6 or more hours?	How often past 6 months (6M) not able to stop?
How often past 6M did you fail to do what was expected because of use?	How often during the past 6M did you need to use cannabis in the morning to get going?
How often past 6M guilt because of use?	Have you been charged with a cannabis offense?
Any injuries because of use?	How often were you "stoned" for 3+ hours?
How often in 6M have you devoted lots of time to getting, using, or recovering?	Have you continued to use despite physical or psychological problems made worse?
Do you need to use more cannabis to get "stoned" than you used to?	How often in 6M have you had a problem with memory or concentration related to prior use?
How often do you use when it could be physically hazardous?	Has your cannabis use worsened or caused problems in your social life?
Have you ever thought about cutting down or stopping your use of cannabis?	Have you given up or reduced social, work, or recreational activities because of cannabis use?
How often in 6M problems with memory or concentration after using cannabis?	Has a relative, friend, or health worker suggested you cut down?

Note: Summary of screening tools adapted from information provided by Agerwala & McCance-Katz, 2012, and Adamson et al., 2010.

Appendix D

WHO 2013 ASSIST Feedback Report Card

ASSIST Risk Score for Marijuana
0-3 Low Risk
4-26 Moderate Risk
27+ High Risk
What do your scores mean?
Low: You are at lower risk of health and other problems from your current pattern of use.

Moderate: You are at moderate risk of health and other problems from your current pattern of substance use, both now and also in the future if you continue the same pattern of use.

High: You are at high risk of experiencing severe problems (health, social, financial, legal, relationship) as a result of your current pattern of use and could be dependent.

Marijuana
Your risk of experiencing these harms is
Low _ Moderate _ High _ (check one)

Regular use of marijuana is associated with:
Problems with attention and motivation
Anxiety, paranoia, panic, depression
Decreased memory and problem solving ability
High blood pressure
Asthma, bronchitis
Psychosis if a personal/family hx of schizophrenia
Heart disease & chronic obstructive airway disease
Cancers

T**he Ten-step ASSIST-linked Brief Intervention**

1. Ask the client, "*Are you interested in seeing how you scored on the questionnaire*?"

2. Give Feedback about scores and associated risks use using the ASSIST Feedback report card.

3. Advise the client that they can reduce their risk by reducing their substance use

4. Responsibility – let the client know that what they do with the information is up to them

5. Ask the client "*Are you concerned by your score for marijuana use? How?*"

6. Ask the client "*What are the Good Things about using marijuana*?"

7. Ask the client "*What are the Less Good Things about using marijuana*?"

8. Ask the client "*How concerned are you about the less good things about using marijuana*?"

9. Summarize and reflect back the client's discussion of their drug use

10. Give the client materials including a Self-Help strategies booklet & Feedback card

Note: Adapted from the World Health Organization, 2013.

Appendix E

Summary of the WHO 2010 Self-Help Booklet For Changing Substance Use

1. Introduction: The booklet is designed for people older than 18 years with low to moderate risk substance use. Individuals with high risk substance use should be referred for specialty care in discontinuing substance use. The booklet gives ideas about how to change substance use. Individuals experiencing severe withdrawal symptoms when discontinuing substance use should be advised to seek immediate medical care.
2. The booklet contains information on the definition of "risky" substance use and a definition of substance abuse problems.
3. Encouragement is offered, "It is possible to change substance use – many people have".
4. The booklet provides advice on how to get support in changing substance use.
5. Users are advised to make a list of problems associated with drug use and to create a substance use "balance sheet" that weighs the pros and cons of substance use.
6. Users are advised to rate their concern about their substance use and rank the substances used from the one that causes the most concern to the least concern.
7. Users are advised to measure their substance use by writing down information about each substance What, When, Where, Who, and the money spent on using a substance.
8. Information is provided on how much substance use is too much.
9. Users are advised to look at the reasons to change. If there are no reasons to change they may not want to continue with the booklet.
10. Users are advised on how to set a goal for changing substance use and users are educated on how to make a contract for change.
11. Information is provided on "moving ahead", on "high risk situations", on setting goals for stopping, how to avoid relapse, and on coping with cravings.
12. Helpful tips are offered on discontinuing substance use and ideas are offered on "handling high risk situations".
13. Strategies are offered on how to say "no", how to "stick with it", what to do "when things go wrong", and alternatives to substance use.

Note: Summary of self-help manual written by Humeniuk, Henry-Edwards, Ali, & Meena, 2010.

Appendix F

Write down any problems relating to your substance use here	
Substance **1**	Problem
2	
3	
4	
5	
6	

PROS & CONS OF SUBSTANCE USE		
Continuing my present substance use pattern		Stopping my substance use
PRO		
CON		

HOW CONCERNED ARE YOU ABOUT SUBSTANCE USE?										
0	1	2	3	4	5	6	7	8	9	10
Not at all concerned										Extremely Concerned

Note: Tables from self-help manual written by Humeniuk et al., 2010.

Appendix G

Fill in this "substance use diary" for your substance use over the last week					
When?	Where?	Who with?	What?	How much?	Money spent?

Reasons to change my substance use
1
2
3
4
5

My contract with myself
I will …
I will …
I will …
I will …

Note: Tables from self-help manual written by Humeniuk et al., 2010.

Appendix H

List your "high risk situations" here
1
2
3
4
My "substance use guidelines" are…
1
2
3
4

Craving diary

Place and time	**Thoughts**	**Physical feelings**	**Behaviors**

Note: Tables from self-help manual written by Humeniuk et al., 2010.