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The Teen Marijuana Check-Up: An In-School Protocol for Eliciting Voluntary Self-Assessment of Marijuana Use

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Abstract

Given the prevalence of regular marijuana use among adolescents and associated risks for adverse consequences to functioning, effective interventions are needed that are tailored for this population. To date, most such counseling approaches have relied on non-voluntary participation by adolescent marijuana smokers and the outcomes have been only modestly successful. The Teen Marijuana Check-Up is a brief motivational enhancement intervention publicized as a non-pressured and confidential opportunity for the teen marijuana smoker to "take stock" of his/her use. The intervention is designed for in-school implementation and intended to elicit the teen's voluntary participation. This paper highlights the manner in which adolescents are recruited, key intervention elements, the nature of the counseling style utilized, and clinical challenges. The outcomes of two trials with this intervention are briefly discussed.

Keywords

cannabis; marijuana; adolescent; brief intervention; check-up

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Introduction

While marijuana experimentation or occasional use by adolescents may not lead inevitably to problematic consequences, heavy ongoing use increases the likelihood of adverse effects. Marijuana remains the most used illicit drug in the United States with 14.6 million users (SAMHSA, 2005a). Use of marijuana among adolescents continues to be prevalent. The percentage of 12th grade students who reported lifetime marijuana use is 44.8% (34.1% for 10th grade students). Past year and past month use among high school seniors is 33.6% and 19.8% respectively (26.6% and 15.2% for sophomores; NIDA, 2006). Further, results from the National Survey on Drug Use and Health indicate 3.9% of 12−17 year olds meet marijuana abuse or dependence criteria (SAMHSA, 2005a).

Regular early marijuana use is associated with early school drop-out even after controlling for a number of factors that may account for this relationship, e.g., other substance use, mental health and family background (Lynskey, Coffey, Degenhardt, Carlin, & Patton, 2003). Adolescent marijuana use is related to increased behavior problems, delinquency, physical fights, legal problems and emergency room visits (Dennis, 1999). Adolescents who have other problems emotionally, at school, at home, or with the law and who smoke marijuana have an increased risk of becoming dependent on this drug (Brook, Balka, & Whiteman, 1999; Crowley, Macdonald, Whitmore, & Mikulich, 1998). A recent longitudinal study conducted with African American and Puerto Rican youth suggests adolescent marijuana use inhibits healthy transitions into adulthood. Specifically, lowered educational and occupational expectations, collecting welfare, being fired from a job, and being an unmarried parent were related to earlier marijuana use as an adolescent (Brook, Adams, Balka, & Johnson, 2002; SAMHSA, 2002).

Adolescents who smoke marijuana are more likely to smoke tobacco (Colby, Chung, O'Leary, Spirito, Rohsenow, & Monti, 1998). Moreover, earlier and/or greater involvement with marijuana is associated with a greater likelihood of using multiple illegal drugs now and during one's lifetime (Kandel, 1995) and an increased risk for developing drug abuse or dependence as an adult (SAMHSA, 2005b). Illicit drug dependence or abuse by adults are greatest among those who first used marijuana at or before age 14 (13.4%) compared with adults who initiated marijuana use at or above age 18 (2.7%).

The risk of experiencing current marijuana dependence, given any smoking in the past year, is estimated to be greater for adolescents (aged 12 − 17 years) than for adults: 14% versus 7%, respectively (Kandel, Chen, Warner, Kessler, & Grant, 1997). Recent analyses of National Household Survey data from the years 1995−1998 indicate adolescents are more likely to report individual marijuana dependence symptoms and appear to over-report two dependence symptoms (“unable to cut down” and tolerance) compared with adults (Chen & Anthony, 2003). For these reasons, developing effective substance abuse interventions designed for adolescents is important. Re-directing risky behavioral trajectories in adolescence can promote well being and health across the life span (Schulenberg, Maggs, Steinman, & Zucker, 2001).

The outcomes of interventions focusing on marijuana use by adolescents are mixed, with some studies reporting decreases in marijuana use (Center for Substance Abuse Treatment, 1999; Grella, Hser, Joshi, & Rounds-Bryant, 2001; Hser, Grella, Hubbard, Hseih, Fletcher, Brown, et al., 2001) while others have demonstrated minimal change or even an increase in marijuana use after outpatient treatment (Simpson, Savage & Sells, 1978; Sells, S.B., & Simpson, D., 1976; NIDA, 1985; Hubbard, Marsden, Rachel, Harwood, Cavanaugh, & Ginzburg, 1989; Substance Abuse & Mental Health Services Administration Office of Applied Studies, 1995). Recently, the Cannabis Youth Treatment (CYT) project tested the relative cost-effectiveness of five promising interventions aimed at reducing marijuana use and associated problems in

600 adolescent marijuana users (Dennis, Titus, Diamond, Donaldson, Godley, Tims, et al., 2002). The interventions included: 1) 5-session Motivational Enhancement Treatment and Cognitive Behavioral Therapy (MET/CBT), 2) 12-session MET/CBT, 3) Family Support Network plus the 12-session MET/CBT, 4) Adolescent Community Reinforcement Approach, and 5) Multi-Dimensional Family Therapy (Dennis, Godley, Diamond, Tims, Babor, Donaldson, et al., 2004; Diamond, Godley, Liddle, Sample, Webb, Tims, et al., 2002). Seventy-one percent of the participating teens used marijuana weekly and 86% met criteria for abuse or dependence. At the time of admission, 74% had no history of substance abuse treatment and 80% did not believe they had a drug or alcohol problem. Few between group differences were found at follow-up. During treatment, a 43% reduction in days of marijuana use was evident, with 39% reaching 30+ days of abstinence. Past month substance problems were reduced by 37%. The reductions in days of marijuana use and substance problems were sustained by the 12-month follow-up. Decreases in a range of other behavior problems at 12 months after intake also were evident (Dennis, et. al., 2004). Although the CYT identifies effective treatments, the results may apply primarily to adolescents coerced into treatment via legal or parental involvement. Interventions tailored to attract voluntary, self-referred adolescents with marijuana disorders to treatment have not been developed or studied systematically.

Facilitating Voluntary Participation

To effectively elicit the voluntary participation of teen marijuana smokers, an intervention likely will need to take several factors into account: (1) most users initially will not be highly motivated to cease or reduce use; (2) a subgroup of users who are experiencing adverse consequences will be willing, under suitable circumstances, to acknowledge concerns about their use; (3) a brief intervention will be perceived as presenting less burden, and thus engender less resistance, than one that is more extended; (4) describing the intervention as an educational rather than a therapeutic experience will reduce the teen's apprehension about being expected to change; (5) teens may have erroneous perceptions about the percentage of their peers who use marijuana; (6) ensuring that the individual's confidentiality is protected will be of great importance; and (7) an approach that is respectful of the adolescent's ability to make good health decisions will promote its acceptability among teens. Several recent innovations in the chemical dependencies field fit well with these premises: the paradigm of stages of change, the elucidation of a counseling approach called motivational interviewing, and the introduction of a motivational enhancement treatment modality called a “check-up.”

Stages of Change

The concept of a continuum of motivational readiness for change offers insights on how services might be designed in order to reach the adolescent marijuana smoker. DiClemente and Prochaska (1998) described the process of addictive behavior change as having five distinct stages: precontemplation, contemplation, preparation, action, and maintenance. Precontemplation is characterized by a lack of intention to change a given behavior despite the problems it is causing. People in contemplation are considering but are undecided about making a change. Preparation is marked by taking steps to prepare for making a change, e.g., picking a quit date and planning on how to dispose of paraphernalia. Individuals in the action stage are actively making changes in their behavior. The maintenance stage is characterized by behavior that sustains changes already made.

The stages of change paradigm suggests that since adolescent marijuana users in the contemplation stage are weighing the pros and cons of change, providing information to help them assess the personal consequences of their use, offering feedback in a nonjudgmental manner, and giving the teen the opportunity to reflect on his/her personal concerns may facilitate a “tipping of the scales” in favor of change.

Motivational Interviewing

Motivational interviewing is a counseling style that is client-centered and intended to support individuals in resolving ambivalence and enhancing their commitment to change (Miller & Rollnick, 1991; 2002; Miller, W.R., Zweben, A., DiClemente, C.C., & Rychtarik, R.G., 1992). This style is empathic and reflective, with the clinician emphasizing his/her interest in client concerns and thoughts both favoring and opposing continued drug use. If the client expresses ambivalence about changing, the clinician encourages elaboration of the client's pro/con thoughts and uses reflective listening to express empathy rather than confront him or her with the need to change. The assumptions are that acceptance facilitates change and that ambivalence is normal. The goals of motivational interviewing are to promote a candid appraisal by the client of his/her drug use experiences, to facilitate the client's perception of a discrepancy between his/her present behavior and important personal goals that are incompatible with that behavior, and to elicit arguments favoring change from the client. The motivational interviewing style avoids the confrontational and oppositional exchanges that commonly occur when a teen and adult talk about a teen's drug use.

The “Check-Up.”

The check-up is an example of a modality called motivational enhancement therapy (MET), one approach to motivating change in substance users. It consists of conducting a behavioral and attitudinal assessment followed by the provision of feedback, with the clinician using motivational interviewing strategies while interacting with the client. When appropriate, the clinician also provides interested clients with a menu of change options, including self-change, support groups, and more formal treatment possibilities.

This modality had its origin in the alcoholism field. Miller, Sovereign and Krege (1988), looking for a way to reach problem drinkers who were neither seeking treatment nor self-initiating change, designed and tested an intervention they called “The Drinker's Check-Up.” Advertised as not for alcoholics and not treatment, this brief intervention (an assessment interview followed by a feedback session) nonetheless attracted a sample of individuals whose drinking met diagnostic criteria for alcoholism. Moreover, exposure to the check-up led to treatment entry or self-initiated drinking reduction in a substantial subset of the participants.

Borrowing from the Drinker's Check-Up model, the authors developed and tested a similar intervention with adult marijuana smokers (Stephens, Roffman, Fearer, Williams, Picciano, & Burke, 2004). This work raised another question: might teen marijuana smokers resonate to the opportunity to discuss their use if offered a marijuana check-up? Would exposure to this intervention lead to behavior change? Funding from the National Institute of Drug Abuse has made it possible to conduct research with Seattle high school students in order to seek answers to these questions. Components of the intervention and its delivery process are described in the next section, followed by a brief summary of NIDA-funded trials concerning the intervention's efficacy.

The Teen Marijuana Check Up

Intended Participants

The Teen Marijuana Check-Up (TMCU) is intended to serve both secondary prevention and early treatment functions for adolescent marijuana users. In designing this approach, our objective was to voluntarily attract teens whose attitudes about their use range from being content, having some ambivalence, or being largely dissatisfied. This intervention is meant to reach teens who might not otherwise seek out traditional treatment and who are either at-risk for developing marijuana disorders or currently experiencing multiple marijuana-related problems.

Recruitment

Teens are able to enroll in the TMCU through one of three avenues: by indicating their interest after attending a classroom presentation about the project; by being referred to the program by a teacher, counselor, other school staff member, or friend; or by self-referring after seeing project publicity.

With the cooperation of high school teachers, TMCU health educators[1] deliver guest talks about marijuana and its effects on health and behavior. One component of the talk introduces the TMCU and offers students the opportunity to sign up confidentially for a private conversation with a staff member to learn more about the project. To promote recruitment, project staff members model the communication style of the TMCU while delivering a presentation that highlights empirically supported up-to-date health and behavioral marijuana effects. That is, they strive to demonstrate that project staff members hold a non-judgmental and accepting stance as they elicit the students' own ideas about the effects of marijuana use. Beginning the talk with a discussion of the perceived benefits of marijuana use, the presenter expresses interest in hearing all viewpoints by inviting everyone to share their opinions. At the outset of the talk, students are encouraged to avoid personal disclosure that would be incriminating before peers and teachers.

While the students are invited to generate topics to be discussed, the presenter - using overhead transparencies - makes a point of addressing effects of marijuana on the lungs, driving, cognitive functioning and the differential impact of marijuana on adults and teens. When the focus of the presentation shifts to an introduction of the TMCU, the presenter describes the project as an opportunity for a teen who smokes marijuana to further explore how it might be impacting his or her life. Students learn that if they participate, they will experience a confidential interaction that will acknowledge the wide range of experiences people have with marijuana and will be free of any pressure for the teen to change. Each presentation ends with students being asked to complete an evaluation of the session. Students interested in having a private meeting to learn more about the project can signal their interest by writing their names on this otherwise anonymous questionnaire.

Confidentiality

Washington state law permits adolescents to receive substance abuse treatment without parental consent. We believe that if parental consent were required for a teen to participate in the TMCU, many adolescent marijuana smokers who have concerns about their use would not be willing to approach their parents to discuss participating and would be missed.

Teens who are considering enrolling are informed that their participation and the information they share with the project will be confidential and not shared with parents, school personnel, or any other individuals. The few exceptions mandated by law (e.g., child abuse) are explained during the informed consent process.

Screening and Assessment

During an initial interview, interested teens are informed about the TMCU and screened for eligibility. In our studies, eligibility criteria included the following: 14−19 years of age, English speaking, available for the duration of the intervention, used marijuana on at least 9 of the preceding 30 days, and no medical or psychiatric illness that would preclude the individual benefiting from this intervention.

[1]We believed that a staff title such as counselor might convey the expectation that the TMCU was a therapeutic intervention designed to change the individual's behavior. We chose the title of "health educator" as a better fit with the check-up's educational nature.

Teens who agree to participate complete a self-administered computerized questionnaire. The Audio-Computer-Assisted Self-Interviewing (A-CASI) assessment system offers several advantages: (1) students can answer questions in complete privacy, even if their reading ability is limited; (2) pre-programmed conditional branching of questions avoids potential confusion (e.g., “if no, skip to question 10, but if yes, answer the following question”); (3) it provides an efficient administration method when assessment periods are limited by the time a teen can be excused from class; and (4) the personalized feedback reports (see below) used in the intervention can be generated immediately and automatically.

The questionnaire addresses the following: (1) frequency of marijuana, alcohol and other drug use; (2) recent inpatient, outpatient, and 12-step treatment experiences related to alcohol, other drugs, and emotional/psychological problems; (3) attempts the teen might have made to reduce marijuana on his/her own; (4) effects the teen expects to experience following marijuana; (5) positive consequences associated with marijuana use; (6) symptoms of marijuana use disorders (abuse and dependence); (7) perceived costs and benefits associated with stopping or substantially reducing marijuana use; (8) self-efficacy for avoiding marijuana use; and (9) important goals for the next several years.

The Feedback Sessions

Two feedback sessions are scheduled for each teen approximately one and two weeks after completion of his/her computerized assessment. The exploration of the teen's attitudes and motivation can be thought of as a process involving three phases: rapport and trust building, taking stock, and looking to the future.

Rapport and Trust-Building—The intention in the feedback sessions is to help the teen deepen his/her understanding of how marijuana fits into their lives and, if they express concerns, to be offered support in setting goals and choosing strategies for change. Motivational interviewing is a counseling style that incorporates several key principles: express empathy, develop discrepancy between current behavior and personal goals or values, roll with resistance and avoid confrontation, emphasize personal responsibility, and support self-efficacy for behavior change. All of these principles are important throughout these sessions, but the salience of each can shift over time. As an example, empathic communication is of substantial importance at the beginning as the health educator seeks to establish rapport and facilitate the teen's candid discussion of his/her experiences. The health educator opens the first session by affirming the adolescent for attending, introducing the Personal Feedback Report (PFR), and summarizing how the time together will be spent in that meeting.

The PFR, printed in booklet format with colorful and engaging graphics, is constructed from information given by the teen in his/her computerized assessment. It is organized into the following sections: the teen's history of marijuana use; his/her recent patterns of use; normative data comparing the teen's current level of marijuana use and the age when he/she first tried marijuana; the good and not-so-good effects he/she has experienced while using marijuana; problems related to marijuana use; his/her recent patterns of alcohol and other drug use; the perceptions of support network members concerning the teen's marijuana use; the teen's life goals; the costs and benefits anticipated if he/she quit or reduced use; and his/her situational confidence in being able to avoid marijuana. It is accompanied by another booklet titled, “Understanding Your Personal Feedback Report.” Reviewing the PFR serves as a stimulus for dialogue.

The health educator uses the first page of the PFR to invite the teen to tell his or her story of marijuana use, describing patterns of past and current use and the feelings related to it. The health educator may ask, “What was going on in your life when you first smoked weed?”

Throughout, the health educator is curious and genuinely interested in the teen's experiences with marijuana, both the positive and not so positive.

Graphs with normative data taken from recent state surveys of high school students are reviewed to illustrate how the teen's frequency of use compares to that of other teens his or her age. Teens often react with skepticism to this information and the heath educator avoids creating more resistance by not insisting on its accuracy, but rather by listening to the teen's reactions and reflecting them back. For instance, the health educator might say, “The survey findings don't seem realistic to you when they show that over half the teens your age haven't smoke pot, since everyone you know smokes.” By rolling with this resistance, rapport can be maintained and strengthened.

By expressing a desire to understand the teen's positive experiences (e.g., “Tell me about how marijuana helps you relax”) and responding without judgment, the health educator seeks to facilitate candor from the teen in subsequently discussing any negative consequences. In brief, the initial rapport and trust-building stage of the PFR review is intended to promote the teen's perception of the “check-up” as a safe opportunity to discuss both the benefits and the problems associated with marijuana use.

Taking Stock—Helping the teen to perceive and explore any existing discrepancies between his/her marijuana use and important personal goals or values is the guiding motivational interviewing principle for the middle phase. Sections of the PFR are reviewed which list the teen's answers to questions in the assessment concerning the not-so-good consequences of marijuana use. These marijuana effects are discussed in detail, much as the positive effects were discussed. The health educator asks how and when the effects are experienced, and avoids pejorative characterizations such as “problems.” The health educator might ask, “When do you notice marijuana making it hard for you to concentrate?”

Exploring how marijuana fits into other areas of the teen's life offers additional opportunities to develop discrepancy and elicit intrinsic motivation. A section in the PFR about social support is intended to help the teen identify important people in his or her life and examine how his/her marijuana use affects those important relationships. In a discussion about how these individuals feel (or would feel if they knew) about the teen's marijuana use, teens are able to articulate and consider a variety of perspectives about their own use. For instance, the health educator might ask, “What concerns your friend, Tom, about your pot smoking?” “What do you think of his concerns?”

A page in the PFR on which the teen's top five life goals are listed is reviewed. Teens are asked how marijuana use affects each goal (e.g., positively, neutrally, negatively) and they are invited to speculate how decreased use would impact the achievement of each goal. The health educator prompts the teen to elaborate on his/her thinking about any discrepancies between important aspirations and current marijuana use. It is assumed that if the teen sees his/her behavior as conflicting with important personal goals (e.g., health, school, happiness, friends, family), motivation for change is likely to be heightened and the teen will be receptive to discussing marijuana use change goals and strategies.

Looking to the Future—While reviewing another page of the PFR, teens are encouraged to think hypothetically about the expected positive and negative aspects of quitting or reducing marijuana use. Drawing on the motivational interviewing principle of supporting self-efficacy, the final section of the PFR is focused on the teen's level of confidence in being able to avoid smoking marijuana if he/she decided to do so. Triggers and high-risk situations for smoking are identified and confidence for resisting smoking marijuana is explored in the contexts of varying moods, social settings, and being under the influence of alcohol or another substance.

Recognizing the teen's overall confidence in specific situations provides further understanding of why the teen is using marijuana. Thus, if a teen has low confidence in resisting marijuana while at a party with friends, it suggests that marijuana is instrumental in how this teen deals with social situations. This is valuable information for the teen because it means a decision to avoid marijuana would necessitate strengthening other ways of coping with peer pressure, being discriminating about participating in certain social situations, and possibly choosing to spend time with friends who do not smoke marijuana. A teen's self-efficacy can also be enhanced when discussing situations in which confidence for avoiding marijuana use is high. These alternatives to smoking are explored and the skills and strategies being utilized by the teen are reinforced.

When the entire PFR has been reviewed, the health educator summarizes its key themes with an emphasis on the adolescent's expressions of motivation to change. The health educator asks the teen for his/her perspective about the summary: “Let me know if I have this right?” “What have I missed?” This summary reinforces the teen's sense of having been non-judgmentally listened to and also provides the illuminating experience of hearing his/her feelings about marijuana, including ambivalent attitudes, reflected back. The adolescent is given the opportunity to further reflect on his or her marijuana use and experience with the PFR.

Drawing on the motivational interviewing principle of reinforcing personal responsibility, the health educator brings this phase to a close by asking, “Where do you see yourself going from here?” This conveys to the adolescent that they are responsible for deciding whether or not change is needed, what type of change is needed, and how to go about making that change. The health educator does not rush the teen into premature decision-making and if the teen appears unsure about change, the health educator respectfully returns to exploring the teen's ambivalence and gives the teen space and time to consider his or her options. If the teen decides change is needed, the health educator helps to explore change options. If the teen decides that change is not a choice for them at this time, the health educator uses more hypothetical thinking with the teen: “What would have to be going on in your life for you to think you may need to change your marijuana use?” This allows the teen to explore and articulate indicators that would signal to him or her when change is necessary. Ways in which the teen has avoided problems thus far are explored and reinforced.

Shifting Focus from Exploring Motivation to Planning Change

Only if a teen expresses motivation to change or cease marijuana use will the health educator offer specific help in setting marijuana use goals and developing skills to meet those goals. A change skills booklet (“Strategies that Work”), written for the TMCU, was designed as a step-by-step guide to identifying a marijuana use goal, defining the internal and external triggers that may interfere with meeting the goal, and strategies to handle triggers. The health educator introduces the booklet to the teen by offering it as a tool for exploring the possibility of, and means to, changing marijuana use. The skills booklet is presented as a menu of options and the table of contents is reviewed. The health educator encourages each teen to engage with the booklet by writing out goals, challenges, and favorite strategies and by reviewing sections that he or she finds pertinent.

The health educator might suggest reviewing topics linked to issues discussed during the review of the PFR. Examples of topics include: setting a goal; seeking support; identifying challenges; choosing strategies; handling urges to use; coping with stress, negative thoughts, and emotions; dealing with social pressure; coping with boredom; resolving problems with sleeping; considering the impact of drinking and other drug use; dealing with a setback; rewarding oneself; and making the commitment in writing. Ideas in relevant sections are explored and clarified, and the teen's perspective is invited. Emphasis is placed on the personal responsibility

of the adolescent to decide whether and how to use this information. If time permits, specific behavior change strategies are practiced.

Clinical Challenges

What is a successful outcome?

One challenge associated with “check-up” interventions pertains to staff training. Health educators who have previously been trained as counselors may tend to evaluate their competence based on the degree to which their clients change. A check-up intervention, however, can be expected to attract a wide array of clientele in various stages of change, some of whom may not be experiencing adverse consequences resulting from their drug use. Some may participate in a check-up in order to become more fully educated, rather than out of concern about associated problems. Some may recognize a need to change, but choose to reduce rather than eliminate marijuana use.

A counselor who becomes discouraged by a client who either does not express motivation for change or chooses to continue use at a reduced level may communicate an expectation to clients that the only acceptable outcome is becoming abstinent, thus losing sight of the check-up's purpose, and threatening the integrity of the modality's public presentation as a non-pressured opportunity to examine one's behaviors and one's options. As a harm reduction intervention, the check-up's value is in voluntarily reaching teen marijuana users and prompting their candid self-appraisal of the drug's impact in their lives. Therefore, staff training and supervision need to emphasize the skillful use of motivational interviewing skills and appropriate responses to expressions from the client that he/she is ready to work on setting goals and choosing change strategies.

How can beliefs that marijuana use is normative among peers be addressed?

Social norms theory suggests that teens who regularly use marijuana will overestimate the percentage of their peers who use and their frequency of use (Kilmer, J.R., Walker, D.D., Palmer, R.S., Mallet, K.A., Fabiano, P., & Larimer, M.E., 2006). This perception may be reinforced by one's associations with other users (e.g., family members, friends or other peers). An attitude that marijuana use is normative can serve as an obstacle to a candid personal reflection regarding one's marijuana experiences. Therefore, the inclusion of student survey data in the Personal Feedback Report is intended to offer information that may challenge the teen's incorrect assumptions.

At other points in the feedback sessions, the dialogue focuses on behaviors and attitudes of peers and important referents. Sometimes teens mention friends or acquaintances who don't use, or they talk about feeling uneasy about being seen as a ‘pothead’ by students and teachers. Each of these moments allows the health educator an opportunity to both empathize and reinforce motivation for change. As an example, the health educator might say, “You're troubled by the possibility that some students and some teachers might not respect you because of your marijuana use, and you'd like to have their respect.”

How can the use of alcohol and other drugs be addressed?

One section of the feedback report summarizes the teen's recent experience with alcohol and other drugs. Much as teens who regularly get high overestimate its use among peers, it is common for a teen to express his or her belief that alcohol and other drug use is a normal part of being a teenager, i.e., a “rite of passage.” This perception, coupled with the challenge of how to address other substance use in a very brief period of time during the feedback sessions, poses a unique challenge for the health educator.

The health educator seeks from the teen an exploration of how other substance use interplays with the teen's marijuana use and any indications of associated negative consequences. The teen's responses indicate whether more information gathering is warranted. Because of the brevity of the TMCU, having sufficient time to explore both marijuana and other substance use is the main challenge. For those using other substances and alcohol, indications that the teen is possibly at risk lead to the health educator consulting with the project's clinical director and a possible referral to a school counselor or nurse.

How can behavior change skills be taught in a very brief intervention?

Inherent in brief interventions are time constraints. Although one main focus of the TMCU is to increase motivation for change, it is also important to devote time to goal setting and selecting strategies for change with those teens who are ready to change. Complicating this process is the fluid nature of motivation that can fluctuate, with windows of opportunity to concretely focus on behavior change skills appearing and passing quickly, often within a session. A common mistake is to underestimate the strength of ambivalence. When change-oriented talk is heard, the health educator's natural reaction is to offer solutions. However, an ambivalent teen may quickly back away from strategizing about change if this focus is offered prematurely. The balance between introducing change strategies while avoiding resistance is difficult to negotiate, particularly when the health educator feels pressured by the knowledge that only two feedback sessions can be scheduled. Two solutions to this challenge, both of which can be adopted in a school setting, are to permit additional sessions for the motivated teen and to ensure that ready access to substance abuse treatment is available.

How can confidentiality protections be established and maintained?

A key component of the TMCU is that enrollment can occur without disclosure to parents, teachers or school staff. Thus, participation in the project is confidential. Given the nature of the TMCU, teens sometimes share information about their lives that may involve risky and dangerous behavior. This may include the use of drugs and alcohol, driving under the influence, risky sexual behavior, suicidal or homicidal ideation, or mental health issues. The health educator must assess the situation being described and respond in a way that both respects the confidentiality agreement and appropriately attends to the participant's safety.

A protocol for assessing and responding to clinical deterioration and a venue for discussing such issues with the intervention team is essential. Often the central assessment issue is the determination of imminent danger from risky behavior. The answer to this question informs how the health educator responds. Clearly, if a teen is reporting intention to harm him/herself or others, confidentiality is broken to protect the individual/s in question. However, risky behavior is often less straightforward and several responses are possible. Reflective listening can be utilized to clarify intentions, support non-risky behavior and convey understanding. Expressing concern or taking further steps to intervene in poor decision making may be necessary. Maintaining confidentiality and engaging with the teen to enhance self-motivation to change risky behavior are the preferred methods for the health educators.

Efficacy Trials

Two in-school trials have been completed with the TMCU. The first, employing a single group, pre-post design, involved a single feedback session following a baseline assessment interview. (The study's methods and outcomes are reported in Berghuis, Swift, Roffman, Stephens, & Copeland, 2006.) The 54 participants in this study were reassessed at a 3-month follow-up interview. The typical participant was a 15 year-old white male who lived with his parents. On average, participants reported smoking marijuana on 10 of the last 30 days (range 1−30). The sample was divided into lighter (8 days or less in last 30 days; n=27) and heavier (9+ days in

last 30 days; n=27) smoker comparison groups. This cut-off was chosen because it hypothetically distinguished between participants who smoked primarily on weekends (on average 2 or fewer days per week) from those who smoked more frequently (over 2 days per week on average). While a majority of participants had attempted on multiple occasions to voluntarily reduce (56%) or stop (80%) their marijuana use, more than half of the heavier users were not currently committed to change. Reductions in marijuana use were found at the 3-month follow-up, specifically among heavier smokers. Forty-four percent of participants (n=24) reported having made voluntary reductions in their marijuana use since the intervention, and almost 15% (n=8) reported abstinence from marijuana in the 30 days prior to their follow-up session. The intervention was well received and half of the participants were interested in additional sessions.

In the second trial, 97 adolescents who had used marijuana at least 9 times in the past month were randomly assigned to either an immediate two-session MET intervention or to a 3-month delay condition. (The study's methods and outcomes are reported in Walker, Roffman, Stephens, Berghuis, & Kim, 2006). Two-thirds of the sample characterized themselves as in the precontemplation or contemplation stages of change regarding marijuana use. Participants' marijuana use and associated negative consequences were assessed at baseline and a 3-month follow-up. Analyses revealed both groups significantly reduced marijuana use at the 3-month follow-up, however, no between group differences were observed. Despite the absence of a clear effect of MET, this study demonstrated adolescents could be attracted to participate in a voluntary marijuana intervention that holds promise for reducing problematic levels of marijuana use.

Conclusion

The Teen Marijuana Check-Up is designed with the intention of attracting voluntary participation by high school students who use marijuana, are neither seeking treatment nor self-initiating change, and are experiencing adverse consequences associated with smoking marijuana. Its delivery as an in-school brief intervention, its marketing as an opportunity to take stock of one's marijuana use with no pressure to change, the confidentiality protections that are assured to participants, and the intervention's delivery by staff members who are trained in the use of motivational interviewing strategies are all likely key elements of its efficacy in reaching teens who smoke marijuana.

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