STRATEGIES AND POSSIBILITIES OF MOTIVATIONAL INTERVIEWING IN ADOLESCENCE: AN INTEGRATIVE REVIEW

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ABSTRACT: An increase in drug use by adolescents can be observed, as well as the emergence of studies that show the Motivational Interview as a possible therapy for this population. This study aims to review information in the literature regarding the effectiveness of the Motivational Interview for use with adolescent users of alcohol and other drugs. An integrative review of national and international literature was conducted, using the keywords “motivational interviewing” and “adolescents”, providing a total of 22 articles that were included in the analysis. The studies show that the motivational interview is a promising technique, evidencing a decrease in the pattern of drug use by the adolescents studied. This technique was shown to be efficient for use with adolescents, however, studies on this subject are very scarce and recent, suggesting the need for further research in this area.

INTRODUCTION

The abusive use of psychoactive substances, which is currently established as a mental disorder, has become a worldwide concern due to its high frequency and the risks that it may have for health. This habit, which is a very ancient custom, only began to be systematically studied, and became better understood, during the last century. These substances are used by diverse populations, on diverse occasions, and constitute a major social problem.1

Despite the use of alcohol and other drugs being an issue that involves society as a whole, some populations that are more vulnerable to such use can be highlighted. This study focuses on the scenario of the adolescent.

In the literature, adolescence is considered to be a period of great emotional instability, since it is during adolescence that the transition between childhood dependence and adult autonomy occurs, characterized by sociocognitive, relational, emotional, sexual and identity paradoxical transformation processes, which do not occur without conflict or anguish. Adolescence is a period of emotional reorganization and intense fragility.2

The scenario of the adolescent is very different from that of the child, since at this time there is a major gain in autonomy, an evolution of the sexuality, and other factors that often provide a sense of dissatisfaction with their bodies, environment and relationships. It is also a stage full of indecision, marked by the passage from the protection of childhood to the exposure of adulthood, factors that make individuals vulnerable to destructive behavior and attitudes.

The use of alcohol and other drugs by adolescents is characterized in the literature as a matter of extreme importance, since adolescence is a stage full of biological and behavioral changes that, among other factors, make the adolescent want or need to use substances. Drug use is a risk factor for violence, organic damage, school abandonment, driving in inebriated states, and unsafe sexual practices, among other harmful situations.3,4

In Latin America, studies indicate that alcohol is the substance most commonly used by adolescents, with higher rates among males. Besides alcohol and tobacco, the available indicators show a high prevalence in the use of solvents and prescription drugs, these drugs being uncommon in developed countries.3,5

In Brazil, the number of individuals who used drugs at least once in their lifetime rose between the years 2001 and 2005. Alcohol use increased from 68.7% to 74.6%, tobacco 41.1% to 44%, cannabis 6.9% to 8.8%, cocaine 2.3% to 2.9%, and stimulants rose from 1.5% to 3.2% in the respective years. In a population of adolescents, 60.7% reported that they had used alcohol at least once in their lives, tobacco was experienced by 16.9% of the adolescents and other drugs by 2.4% of them.3,6

The literature highlights the difficulties that the adolescent population presents in relation to psychotherapy: great hostility, distrust and resistance, as well as low motivation for the treatment. In this scenario, Motivational Interviewing (MI) has shown promise as a therapeutic option for the treatment of adolescents. The reason MI offers good prospects for the treatment of this population is related to its technical characteristics, based primarily on the attitudes of the therapist, consistent with treating the interviewee in a genuine way, with empathy, in a welcoming environment, without confrontation and with positive consideration.7,8

Motivation, the main object of the MI intervention, is characterized as a dynamic process, consisting of stages of behavioral change. The individual passes non-linearly through these stages, which are: pre-contemplation, contemplation, preparation, action and maintenance.9 Motivational interviewing assumes that adherence of individuals to the treatment depends on their motivation, which can be changed throughout the treatment.10 The stages of motivation are described in the literature10-31 as follows: Pre-contemplation - people in this stage show little or no willingness to change and are often unaware they have a problem. Contemplation - this stage is evident when the individuals realize they have a problem and start thinking about future actions to make the change. In this stage ambivalence is very present, because often the individuals have the desire to change, however, wonder if they have the necessary skills for it. Preparation - the individuals commit to change. This commitment is demonstrated by cognitive and behavioral patterns, and can be perceived when, for example, the individuals stop using words like “should” when they speak about the use of substances and start using words such as “will”. In this stage there is more determination.
regarding the change. Action – the stage in which the individuals begin to make changes in their behavior and their environment. The change is maintained during the experiences that the individual has. Maintenance - the individuals maintain a new state, according to the changes taking place in their behavior. In this stage individuals remain stable for years.

It is important to remember, however, that relapse is part of this entire process. The relapse is a resumption, not necessarily from the initial stage. In MI it is understood that the relapse suggests an onward movement, the individual does not necessarily regress or remain in the same place, since they are more experienced and can integrate what they learned in the episode into their recovery process.11

Motivational interviewing has been shown to be filled with characteristics that make it applicable with adolescents: the low cost of the treatment, easy access and training of the therapists, demonstrating high cost-benefit.7 However, as proposed in 2005,7 more systematized studies are still needed that prove the efficacy of this therapeutic method.

Given the above, the aim is to analyze, through the specialized literature, the efficacy of MI in the healthcare for the adolescent user of alcohol and other drugs.

METHODS

The literature review is a type of study that allows the knowledge about a particular subject to be identified, analyzed and presented succinctly, highlighting its relevance. The synthesis of knowledge is indispensable because of its applicability in the field of practice.12 A literature review encompasses experimental and non-experimental studies, and aims to gather and synthesize the knowledge already produced about the topic under investigation, allowing the available evidence to be sought, evaluated and synthesized for its incorporation into practice.13-14 In this study, the integrative review was conducted in six steps, described below:

First step (theme and guiding question)

Through a preliminary analysis of the literature and epidemiological data regarding drug use in Brazil, the need was perceived for interventions with adolescent users of alcohol and other drugs that are best suited to the development phase in which they are, taking into consideration their low motivation for treatment and limited insight regarding the consequences of alcohol and other drug use. Various studies were found that tested and indicated MI as a suitable technique due to these assumptions, which prompted the following question: Is MI considered effective by the international literature for interventions with adolescents?

Second stage (bibliographic search)

The search was performed in the PubMed, LILACS and SciELO databases, seeking articles in English, Spanish and Portuguese. For the PubMed database, to have been published within the previous 11 years (2000 to 2011) was defined as the limit, crossing the following keywords: “motivational interviewing” and “adolescents” (returning 264 results. Of these, only 63 articles had texts available and only 29 considered the topic). In the LILACS database, the articles without the full text available were excluded, and the keywords “motivational interviewing and adolescents” were used (returned one result). In the SciELO database, the keywords “motivational interviewing and adolescent” (returned 0 results) and “motivational interviewing and adolescence” (returned one result) were used.

A total of 31 articles were retrieved from the literature, and after reading them, 9 were excluded from the sample as they did not address the MI theme specifically in adolescence, or due to being indexed more than once in the database, composing a final sample of 22 articles.

Third stage (categorization)

The information in the articles considered relevant to the research aims was brought together in the form of cards to facilitate data analysis. These cards had fields for filling in information such as: study type and design, quality of the interventions performed, population studied, statistics of effectiveness of MI, types of services where MI was performed, and limits of the studies, as well as others related to the quality and outcomes achieved by the intervention, important for achieving the aim this study.

Fourth stage (evaluation of the studies)

The publications selected were cataloged were reread in full, and the cards were analyzed
by the researchers to ensure that the relevant information from the articles was present in them.

Fifth and Sixth stages (knowledge synthesis, interpretation and discussion)

In this stage the data were subjected to comparative analysis, having been organized in tables, making it easier for the authors to evaluate the results, synthesizing the knowledge gained and making it accessible. By analyzing the tables, it was possible to produce relevant information regarding the efficacy of MI for use in interventions with adolescents.

RESULTS

The articles found through the search strategies are characterized in picture 1.

Picture 1 - Authors, year, language and country of study of the selected articles

<table>
<thead>
<tr>
<th>Authors</th>
<th>Journal</th>
<th>Year</th>
<th>Language</th>
<th>Country of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingersoll K, Floyd L, Sobell M, Velasquez MM, The Project CHOICES Intervention research group</td>
<td>Pediatrics</td>
<td>2002</td>
<td>English</td>
<td>USA</td>
</tr>
<tr>
<td>Channon S, Smith VJ, Gregory JW</td>
<td>Archives of Disease in Childhood</td>
<td>2002</td>
<td>English</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Brown RA, Ramsey SE, Strong DR, Myers MG, Kahler CW, Lejue CW, et al</td>
<td>Tobacco Control</td>
<td>2003</td>
<td>English</td>
<td>USA</td>
</tr>
<tr>
<td>Andretta I, Oliveira MS</td>
<td>Psicologia Clínica</td>
<td>2005</td>
<td>Portuguese</td>
<td>Brazil</td>
</tr>
<tr>
<td>Gray E, McCambridge J, Strang J</td>
<td>Alcohol &amp; Alcoholism</td>
<td>2005</td>
<td>English</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Apodaca TR, Abrantes AM, Strong DR, Ramsey SE, Brown RA</td>
<td>Addictive Behaviors</td>
<td>2007</td>
<td>English</td>
<td>USA</td>
</tr>
<tr>
<td>Deas D</td>
<td>Pediatrics</td>
<td>2007</td>
<td>English</td>
<td>USA</td>
</tr>
<tr>
<td>Horn K, Dino G, Hamilton C, Noerachmanto N</td>
<td>Preventing Chronic Disease</td>
<td>2007</td>
<td>English</td>
<td>USA</td>
</tr>
<tr>
<td>Andretta I, Oliveira MS</td>
<td>Estudos de Psicologia</td>
<td>2008</td>
<td>English</td>
<td>USA</td>
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<tr>
<td>Rapp RC, Otto AL, Lane DT, Redko C, McGatha S, Carlson RG</td>
<td>Drug and Alcohol Dependence</td>
<td>2008</td>
<td>English</td>
<td>Multicentric Study</td>
</tr>
<tr>
<td>Kaysen DL, Lee CM, Labrie JW, Tollison SJ</td>
<td>Journal of Studies on Alcohol and Drugs</td>
<td>2009</td>
<td>English</td>
<td>USA</td>
</tr>
<tr>
<td>Erickson SJ, Gerstle M, Feldstein SW</td>
<td>Archives of Pediatrics &amp; Adolescent Medicine</td>
<td>2009</td>
<td>English</td>
<td>USA</td>
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<tr>
<td>Magill M, Nancy PB, Timothy RA, Damaris JR, Peter MM</td>
<td>Journal of Studies on Alcohol and Drugs</td>
<td>2009</td>
<td>English</td>
<td>USA</td>
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<tr>
<td>Cimini MD, Martens MP, Larimer ME, Kilmer JR, Neighbors C, Monserrat JM</td>
<td>Journal of Studies on Alcohol and Drugs</td>
<td>2009</td>
<td>English</td>
<td>USA</td>
</tr>
<tr>
<td>Brown RA, Strong DR</td>
<td>Addictive Behaviors</td>
<td>2009</td>
<td>English</td>
<td>USA</td>
</tr>
<tr>
<td>D’Amico EJ, Osilla KC, Hunter SB</td>
<td>Alcoholism Treatment Quarterly</td>
<td>2010</td>
<td>English</td>
<td>USA</td>
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<tr>
<td>Segatto ML, Andreoni S, Silva RS, Diehl A, Pinsky I</td>
<td>Revista Brasileira de Psiquiatria</td>
<td>2011</td>
<td>English</td>
<td>Brazil</td>
</tr>
</tbody>
</table>
In Table 1, it can be seen that 77% (12) of the articles had been published since 2006. The oldest article of the sample was published in 2002, 91% (20) were published in English, and the remaining 9% (2) published in Portuguese. It can also be seen that 54.5% (12) of the articles had the United States as the country of study, 13.6% (3) the United Kingdom, 13.6% (3) Brazil, 4.5% (1) Australia, 4.5% (1) Spain and 9% (2) of the articles were produced in Multicentric Studies, involving different countries.

The study conducted in Spain, in 2006,19 concluded that MI-based interventions proved 5.28 times more effective than counseling based anti-tobacco interventions, in primary care units. After six months of intervention, the group that was treated through MI achieved higher rates of abstinence, and the individuals were more actively committed to change, without opting for the treatment due to feelings of guilt or the imposition of the healthcare professionals.19 However, despite MI proving more effective, other practices were being more consistently used in the services.7

Some national and international studies show that MI with adolescents is efficient, because it uses more flexible strategies without confrontation, and intends to work on the motivation, exactly what is lacking in adolescents, who are unlikely to seek a service through their own free and spontaneous will. A motivational approach assumes that the therapist adopts an empathetic and non-judgmental attitude, develops a therapeutic alliance through a process of reflective listening, and helps the user to become aware of the costs of their use. Furthermore, it is a low cost strategy, with easy access to training for the therapists demonstrating a very good cost-benefit.7,10,21,27

In a study performed with 50 adolescent offenders who used alcohol and other drugs, the individuals underwent five MI sessions. All the individuals who completed the process used cannabis at the time of the initial evaluation and, at the re-evaluation, 64% of them were abstinent, which was confirmed by toxicological testing. The amount of daily and weekly use of cigarettes (tobacco) also showed a statistically significant difference. All the adolescents who used cocaine, crack and solvents were abstinent regarding these substances at the re-evaluation. Furthermore, the evolution in the motivational stages of the adolescents is highlighted, since MI decreased the number of adolescents in the pre-contemplation stage, indicating a greater recognition regarding the negative consequences and fewer false beliefs associated with drug use in this population (beliefs similar to: “to use the drug brings more benefits than harm”, “the drug is very important in my life”, “the drug helps me overcome my problems”, etc.).25

In a comparative study conducted in Providence, Rhode Island - USA, a total of 215 adolescent users of alcohol and other drugs were selected to participate in two types of therapy: one group received MI sessions and the other group received a feedback report based on screening questionnaires, and up to five minutes with the therapist to clarify doubts about the information they received. This latter group was called “Feedback only”. Both groups underwent two follow-up evaluations: one at six months and another at 12 months after the interventions. Participants in both groups reduced their consumption of cannabis in the first six months of the follow up, however, only the participants of the MI group continued to reduce the consumption until the twelfth month.29

Regarding motivational interventions performed in groups, an American study conducted this type of intervention, with each group comprised of six young offenders. In an analysis of the satisfaction of the participants regarding the assistance received, the adolescents reported that they liked the style of the group, where they considered the discussions useful for addressing the use of alcohol and other drugs, and that they would use the information obtained in the group to make this possible. In addition to the satisfaction of the adolescents regarding the intervention, it was also concluded that MI had a positive impact on the adherence to treatment of the adolescents. It is noteworthy that MI was considered useful for the management of adolescents in risk situations.2

Motivational interviewing was used with 75 American adolescents and the outcome was a decline in tobacco use by the participants. Furthermore, MI was shown to be an evidence-based practice through systematic reviews, demonstrating significant rates of reduction in the use of nicotine, alcohol and cannabis in the adolescent population.10,23

With regard specifically to tobacco, the literature26 recommends that the motivational approach should be based on the following principles:

1 – Acknowledge the person’s behavior as his or her own personal choice.

2 – Let patients decide the degree to which smoking is a problem for them.

3 – Avoid argumentation or confrontation.
A study showed that in order for MI to achieve good results, the family and the peer group should be involved in the treatment, since these people are the main references for the adolescent. When motivational interventions were facilitated by colleagues and friends of the adolescents, the individuals learnt more effectively than when they were carried out by older individuals and those of different generations. Students who violated the alcohol policies of the educational institutions were sanctioned by the disciplinary body of the institution. Those who agreed to participate in the study were divided into three groups: One group in which MI was performed, one theater group, in which motivational techniques were used, and the other group which was provided with an interactive education program about alcohol. All the groups had students as facilitators. The students in the MI group and the theater group presented greater adherence to the treatment than the alcohol education group. The results showed an increase in the use of protective strategies directed towards alcohol and its related problems.

A study conducted with young women who had sex without using contraception associated with alcohol use, sought to reduce the risk of unplanned pregnancy through MI sessions. Among the women who completed the follow-up of 6 months of the study, 68.5% of them were no longer at risk of having a pregnancy due to exposure to alcohol, 12.6% decreased the amount of alcohol consumed, 23.1% started using contraceptive methods and 32.9% reported changes in both attitudes. The results showed that four MI sessions plus counseling about contraceptive methods may decrease the risk of unplanned pregnancy related to alcohol in young adults and adolescents.

In relation to adolescents who use drugs and have psychiatric comorbidities, MI was again shown to be more efficient than simple counseling. Motivational interviewing led to a greater increase in the self-efficacy of the adolescents regarding the ability to quit smoking, and increased the desire for change in this population. Motivational interview techniques used with people diagnosed with depression who were using cannabis and/or amphetamines led to a significant decrease in the pattern of use.

Using MI techniques with a group of 678 individuals showed that social problems must also be considered during the treatment sessions, as the individuals who had problems, such as transport difficulties, dependent minors, or problematic employment situations, abandoned the treatment despite having high levels of motivation to reduce or stop the drug consumption, concluding that although it is an effective strategy, MI should be linked to social support measures. Motivational interviewing has proven to be an effective intervention method with adolescents, not only in the field of alcohol and other drugs, as observed in two studies conducted in the United Kingdom.

Concerning the number of sessions required for a good result, this is variable and can be from one to five. Techniques, such as decisional balance, self-monitoring and problem solving, should always be included. The initial evaluation and feedback are very important for the adolescents, and must be translated into the language of the adolescent, who must also have time to think and reflect on their habit of use and the future consequences.

Despite the above, some studies have not found results that show MI to be effective in this population. In a clinical study conducted in Brazil, adolescents seeking emergency services for problems related to drug consumption were divided into two groups. One group only received a leaflet about the use of drugs and its damage, while the other group received motivational interventions in addition to the leaflet.

It was noticed that both groups decreased drug use in the same way, finding no significant difference between them. The authors noted that the study was conducted with individuals who received emergency treatment and had already suffered major consequences related to the use, where approximately 40% of these already met the diagnostic criteria for dependence.

The authors suggest that because the condition had already worsened in these adolescents, MI did not have the expected effect, raising the hypothesis that this type of intervention is most effective for use with adolescents in situations of risky of abusive use, acting as a secondary prevention tool.

A similar result was found in a study that compared two different groups of adolescent smokers (one receiving MI and the other simple advice) and found no significant difference between the results of the monitoring of the adolescents. The results of this study indicate that the MI group presented a greater number of abstinence
attempts regarding tobacco, however, these attempts were unsuccessful, and in some cases the adolescents decreased the number of cigarettes per day, although without achieving total abstinence.31

DISCUSSION

Through the characterization of the sample, it can be seen that MI in adolescence came into prominence within the previous four years, and that the country with more knowledge published on the theme is the USA. In Brazil, the efficacy of MI with this population has not been well measured, suggesting that further studies with this theme need to be performed. The results encountered support the literature, since both consider MI suitable for use as a form of treatment for adolescent users of alcohol and other drugs. This is due mainly to the observation of a low level of motivation of the adolescent population regarding treatment adherence, whether as a result of compulsory referral (by the school, family, or judiciary), or failing to recognize their need for treatment (pre-contemplation).7

As described in this study, the literature shows that MI is a suitable technique for the treatment of adolescents, with the attitude of the therapist being the main characteristic behind its success. The emphasis of the MI technique is on the position, posture and procedure of the therapist with the patient.7 The MI intervention requires an approach that respects the uniqueness and autonomy of the patient and provides a welcoming and secure therapeutic environment. In this sense, the literature on MI recommends that a therapist is able to reflect empathy and has positive consideration for the potential of the patient, with a view to promoting their motivation for the reduction and abstinence from alcohol and other drugs through a process of conscientiation.7

Some studies that used MI found that the decrease in drug use observed in their results was not considered statistically significant, which should stimulate further research to better study this tool. In the literature, data can be found indicating that MI disassociated from other interventions does not produce significant and lasting changes, especially when the individuals studied experience a wide range of vulnerabilities.4

Regarding the efficacy of MI, the results indicate that greater investment is needed in the training of healthcare professionals, who feel unable to use the technique.4 A systematic review published in 2011 revealed that training sessions to perform MI are paramount for resolving the ambivalence of the client and to construct their motivation. The results of this study suggest that MI is best learned by professionals in workshops of sufficient duration, with post-training sessions for receiving feedback and applying MI in the routine clinical practice with the clients. Furthermore, the study demonstrates that sessions with people more proficient in the technique, such as Role-play with their peers, help to achieve a better comprehension of MI.34

The studies show that MI with adolescents is especially effective with the issue of tobacco, alcohol and cannabis, however, may be of great value in the treatment for other drugs as well, which has not been well studied.

Corroborating the result that MI is an efficient technique to be used in healthcare treatment, especially in interventions related to alcohol, a systematic review and meta-analysis was found in the literature that states that this is effective and helps clients modify their behavior, outperforming traditional counseling in approximately 80% of the studies. Furthermore, the same review stated that there were no studies that reported MI as harmful or causing any type of adverse effect.35

When evaluating the motivational interventions conducted with adolescents in educational institutions, research shows that the schools can adopt punitive measures or work with the education and rehabilitation of these youths. Increasingly, the institutions are looking for rehabilitation strategies. They could, therefore, involve the active participation of the peers in the programs, so that there is greater adherence by students, since this study found data that motivational interventions facilitated by peers provide more success than traditional interventions.30

CONCLUSIONS

The emphasis of the MI technique is on the attitude of the therapist to respect the uniqueness and autonomy of the patient. It is a brief intervention of up to five sessions, understood as a low cost treatment, with easy access and training of therapists. Although not the approach most used by healthcare institutions today, in this study MI was shown to be effective for the treatment of adolescent users of alcohol and other drugs. However, experimental studies should be performed in Brazil, in order to verify the efficacy of this tool as part of the secondary prevention strategies, since
some of the latest findings in the literature seem to contradict the international results, finding no statistical significance in the application of MI.

The main practical implication of the results found here and discussed in the literature is that the intervention proves effective and should replace advice counseling. It is therefore necessary that the healthcare teams, services and regulatory agencies (health departments, social organizations, etc.) invest in professional training and supervision. Another measure to be taken in the practice is professional training in MI, which is a technique that requires constant supervision, with recycling and training workshops. Therefore, the services should invest in the training of professionals, considering that investing in the training of one professional in courses and workshops, who can return to the team and be responsible for the supervision, is more sustainable than sending several team members for external training. Motivational interviewing should be practiced in an environment that is comfortable for the adolescent, preferably with the support of the family and peers. As a technique that works with the motivation, it is of great value for the practice with the adolescent, who rarely seeks treatment voluntarily and therefore has major obstacles for the acceptance of their problem and progress in the treatment.

REFERENCES


