

# Barriers for implementing an intervention for substance using adolescents when adding a parent component

Barreras en la implementación de intervenciones que incluyen componente para padres en adolescentes que consumen sustancias psicoactivas

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## SUMMARY

*Research has shown that an intervention process with adolescents involving the parents may achieve better results since the interaction with the parents is a protective factor itself. The brief intervention program for adolescents starting substance use is an intervention used in Mexican clinical centers with adolescents who have experienced problems with their substance use but do not present dependency symptoms. The prevention program for parents of adolescents at risk has been applied with the adolescent's intervention to*

*include the parents in the process, but when analyzing the effectiveness of both interventions, barriers for the implementation arose that made the application impossible. This paper analyzes the main barriers to implementing the intervention program for adolescents when adding a parent component and discusses possible solutions reported in previous literature.*

**Keywords:** Substance use, adolescents, parent component, brief interventions.

## INTRODUCTION

The family context is key to the genesis and progression of behavior problems, including substance use, among children and adolescents. An intervention process that involves parents may achieve better results in preventing substance use problems in adolescents (1). Benefits of including parents can include decreasing feelings of isolation, improving communication, changing family attitudes that could be maintaining the problem, and creating a healthier family environment (2,3). Furthermore, including parents has been shown to increase intervention effectiveness among adolescents with depression or anxiety symptoms (4). However, including parents may be a barrier for teens who have hidden their substance use from their parents, and who have no interest in disclosing their use to their parents.

Parental involvement in the intervention

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process can increase the likelihood of intervention success (2-4). The brief intervention program for adolescents starting substance use (PIBA in Spanish) (5) is an evidence-based adolescent substance use early detection and intervention program; the intervention is based on the cognitive-behavioral theory and aims to reduce alcohol and drug use among students ages 12 to 18. The application consists of five stages which are applied sequentially: 1) screening; 2) assessment; 3) induction; 4) treatment, which includes six intervention sessions; and 5) follow-up.

The PIBA is used in more than 300 units of medical specialties, centers for addiction treatment (UNEME-CAPA in Spanish) in Mexico. Over the years it was evident that parent participation changes treatment results, therefore, a new intervention program was designed as a parental component that could be used parallel to the PIBA application. This program is called the prevention program for parents of adolescents at risk (PROPAR in Spanish) (6), also based on the cognitive-behavioral theory, and it was specifically designed to be applied by the UNEME-CAPA therapists when working with parents of adolescents with substance use-related problems. As noted earlier, the additional parental component may increase intervention effectiveness; it also may alienate some teenagers who find it unappealing.

The ongoing research examines the combined effectiveness of PIBA and PROPAR in decreasing drug use and improving psychosocial functioning among substance-using adolescents in Aguascalientes, Mexico. In a recent pilot study, it has been found that parental participation represented a major barrier to adolescent participation on PIBA with PROPAR. Moreover, the investigators found additional institutional-, parental-, and intervention-specific barriers decreased participation. The objective of this article is to analyze these barriers and discuss possible solutions.

## METHODS

Four different high schools from Aguascalientes, Mexico, participated; a total of 1 248 adolescents from the schools were evaluated

according to the PIBA manual, with the POSIT questionnaire. The POSIT has the objective to identify those adolescents who had negative consequences due to their substance use in the past six months. Those who screened positive were further evaluated to identify the risk level of their substance use, and, if necessary, they were referred to the PIBA intervention. All the parents of the 1,248 students were invited to participate in the PROPAR intervention.

The intended experimental design was a randomized controlled trial with pre-posttest measurements (6, 12, and 18 months after the intervention was completed), the adolescents were supposed to be randomized into 5 different groups, where the effectiveness of the PIBA with the PROPAR would be evaluated. 25 parents of a total of 1 248 who were invited to participate completed the PROPAR, therefore we applied an individual screening process on the 25 sons of the participant parents.

Of the 25 adolescents who took the screening process, 21 of them didn't participate in the intervention because they had not experienced consequences for their substance in the past six months. Four of the adolescents reported risk factors for substance abuse in the initial screening, all four of them met inclusion criteria for the PIBA intervention which is reporting consequences for their substance use in the past six months and having an average alcohol use of 7 standard drinks or more or using any illegal drugs, but none of them wanted to participate due to the concern the investigators would share information about their drug abuse with their parents.

In 2016, research was conducted to identify the barriers to the adoption of the PIBA intervention in treatment centers in Mexico (7). A qualitative analysis was conducted with the participation of 16 experts, each one of them was interviewed and the information was analyzed to generate a list of barriers for the implementation of the program.

In this case, we used that methodological background to identify barriers with the information obtained from the session reports of the 3 therapists who conducted the screening process of the 25 identified adolescents. The barriers were analyzed and then categorized as a) institutional barriers, b) parent's barriers, c) adolescent's barriers, and d) intervention barriers.

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### RESULTS

Four adolescents (whose parents participated in PROPAR) were evaluated with the PIBA intervention (mean age = 15.5 years). Alcohol (50 %) was the most preferred substance, followed by tobacco (25 %) and marijuana (25 %). The four adolescents met program criteria for alcohol use problems (mean of 8.79 standard drinks per drinking occasion) as measured by the LIBARE (retrospective baseline) or for drug abuse (using any illegal drug in the past 6 months), but none of them agreed to have the intervention when the therapist informed them that their parents will also be participating in the research, they were

assured that we would not share any information about our intervention sessions with their parents, but still, they refused. Instead, they were provided with a brief counseling session from PIBA.

Less than 5 % of the parents invited to the PROPAR intervention attended the first session, and only 25 of them took all the sessions of the program. On average, parents were 40.35 years of age (SD=4.69). Most of the parents who took the program (40 %) studied until middle school (secundaria). This data shows that the parents who took the PROPAR do not have sociodemographic characteristics that set them apart from the rest of the parents of the schools. The identified barriers are presented in Table 1.

Table 1  
Barriers to PIBA/PROPAR participation

Institutions	Parents	Adolescents	The Intervention
Lack of proper space for the sessions	Lack of time due to other obligations	Fear that information will be revealed brochures do not adapt to the	PIBA: the examples used on the session sociocultural context of all the adolescents
Lack of support from principals	High unattendance and desertion levels	Hiding or changing of personal data	
Wrong beliefs about the program	Low education level and misconceptions	Adolescents don't want to take the intervention due to fear their parents will know about their substance use	PROPAR: the intervention is 12 sessions long. There was a need to adapt the to 4 sessions
Inflexibility to schedule the application	Resistance to make changes on their parenting style		
Demands outside the program objective	"Magic thinking" about results use among peers	Normalization of substance	

### DISCUSSION

Parents' reactions to learning about their son's substance use problems vary based on family characteristics, including parental substance use and educational level (8). Individualized strategies and guidelines must be created for parents so we can provide the information in the most adequate way possible for the problem to

be properly addressed. A bibliographic search yielded some situations like the identified barriers, which can serve as a guide to identify possible solutions.

A particularly important consideration is how to apply PIBA/PROPAR resources and interventions most efficiently, precisely, and cost-effectively. Parental involvement represents a greater use of resources and implementation

time. Knowing in advance which adolescents would and would not participate alongside parents would greatly aid intervention planning and logistics (9).

Beyond logistics, there are some characteristics of the parents that should be considered: 1) parents who report more serious problems with their children's behavior are less likely to participate and may require additional outreach and support in order to participate (1); 2) less-educated parents are less likely to participate and have poorer intervention outcomes, and may require additional outreach and support in order to participate (1), and 3) parents are empowered as prevention agents when provided with information and guidance about adolescent substance use problems (10). As previously suggested (4), giving parents an informative talk before inviting them to join a substance use prevention program may help increase program participation.

PIBA is an early intervention program designed for substance-using adolescents who only recently have initiated substance use, and who do not meet diagnostic criteria for a substance use disorder (SUD). Typically, they have experienced relatively few negative consequences from their substance use, and they have kept their substance use hidden from parents, teachers, and other authorities. This distinguishes them from teenagers with SUD, who demonstrate documentable, severe, and chronic substance use problems requiring clinical intervention. Among teenagers with SUD who receive treatment, the vast majority receive treatment involuntarily (i.e., they are court, school, and/or parent mandated). In comparison, it is important to keep in mind that PIBA/PROPAR is entirely voluntary, and targets teenagers in the earliest stages of substance use problems.

Regarding the specific line of research, we are following, it will be necessary to include this analysis in further attempts to collect information about the efficacy of the PIBA when PROPAR is used as a parent's component. First, it is crucial that we know which adolescents meet the inclusion criteria for the PIBA so we can save resources and invite only the parents of those adolescents. Second, an informative talk with parents might help reduce some of the barriers

such as "magic thinking about the results" and to, ideally, increase participation levels. It could also be helpful to implement a communication session for parents in which we provide similar strategies to those the adolescent receives in the communication session of the PIBA; this session might provide both parents and adolescents the strategies to talk about substance use and treatment expectations in a calmed and respectful manner.

The results presented in this study help to understand how barriers must be analyzed when applying a research protocol, in this scenario, it is crucial to find solutions for these barriers so the PIBA/PROPAR implementation can be made effectively.

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