

# Drug Brief Intervention for Young Adults and Adolescents in the Emergency Department

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## Review Article

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### ABSTRACT

The scientific literature and annual reports show that drug use has increased, not just among adults but also among young people, and the ages of substance use initiation have decreased. Together with this, consumption patterns have also changed. This new pattern in conjunction with drug use increase has raised the number of emergency room visits related to drug consumption. Psychoactive substance use amongst adults and children is one of the most common reasons for visits to emergency departments. Brief Intervention (BI) has demonstrated its effectiveness in reducing and preventing drug use among adults and adolescents in multiple settings. The main goal of this BI is detection and intervention of drug use depending on the pattern of consumption and patient needs. Emergency department visits provide the opportunity to identify drug consumption patterns and may afford access to BI, and the nurses' involvement is an important component in the achievement of this objective.

## INTRODUCTION

Adolescence is a period associated with the discovery and experimentation of drugs. The main reason to test them is curiosity <sup>[1]</sup>. The vast majority of people try drugs between the ages of 13 and 20, a period of great vulnerability. In this regard, such an early age of drug use has been linked to an increase in the risk of related consumption problems <sup>[2,3]</sup>. That is the reason why the efforts should focus on increasing the age of initial consumption as a protective measure regarding adolescent health.

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) edits an annual overview of the European drug state, the *European Drug Report*. The latest published report shows that just over a quarter of the European population, roughly 88 million adults, are estimated to have tried illicit drugs at some point in their lives <sup>[4]</sup>. The report shows that drug use has increased, not just among adults but also among young people (15-34 year old). This is a widespread phenomenon described in developed countries <sup>[4]</sup>. Drug use in Spain has increased among adolescents and this escalation is sustained according to the latest state report on high school age use of drugs published by the Observatorio Español de la Droga y las Toxicomanías (Spanish Drug and Drug Addiction Observatory, OEDT <sup>[5]</sup>). The report found that approximately 80% of adolescents had tried drugs at some point in their lives with alcohol, tobacco and cannabis being the most consumed substances among adolescents. It also showed earlier ages of substance use initiation (alcohol 13.9 years; tobacco 13.6; cannabis 14.9).

Together with this increased drug use, consumption patterns have also changed. In this respect two aspects should be highlighted. First, binge drinking rates have increased <sup>[5]</sup>. Binge drinking is the practice of consuming large amounts of alcohol in short periods of time, limited primarily to the weekends. This pattern has raised emergency visits related to acute alcohol intake <sup>[6]</sup>. Second and for the first time in history, legal drug consumption (alcohol and tobacco) is higher among women <sup>[5]</sup>.

As a result, the drug use increase in conjunction with the changing pattern of consumption has led to an increase in the number of drug related emergency care visits. Psychoactive substances use is one of the most common reasons for visits to emergency departments, both in adults and in Pediatrics <sup>[5-7]</sup>. Cannabis and alcohol are the primary drugs related to such visits <sup>[6-8]</sup>. Furthermore, it has been detected that adolescents who use psychoactive substances have a high degree of comorbidity with

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other mental disorders and that the presence of an externalizing disorder plus substance use is the most common dual diagnosis in Emergency Departments<sup>[7-14]</sup>. In cases of dual diagnosis, consultations tend to be promoted by agitations, adolescents are taken to the emergency room against their will and a high percentage of them usually require a psychiatric admission<sup>[7]</sup>. Clinical studies have also revealed that the existence of a dual disorder is associated with the following: an early debut of both diseases, greater psychopathological gravity, worse treatment adherence, worse treatment response, greater number of hospitalizations, more assistance to the emergency services, greater number of relapses (both the consumption and the disorder) and consequently a worse prognosis<sup>[12,13]</sup>.

## BRIEF INTERVENTION (BI)

Brief intervention occurs during routine patient visits and consists of one to five sessions, lasting no longer than 30 min. They are administered by an interventionist member of the multidisciplinary team (physicians, nurses, psychologists, social workers)<sup>[14-16]</sup>. Apart from that, BIs can vary in structure, targets and theory behind them. The most common ones are those based on Cognitive Behavioral Theory and Motivational Interviewing<sup>[17]</sup>.

The main goal of these BIs is to detect drug use and intervene depending on the pattern of consumption and the patient needs. BI helps patients stop on their own or encourages them to attend specialized treatment units<sup>[14]</sup>. BIs are especially attractive because their brevity offers a cost and time efficient way to address a rising public health issue. The National Institute for Health and Clinical Excellence (NICE) guidelines suggest that BI components should consist of the following: feedback, advice, outline options for change, empathy and self-efficacy<sup>[18]</sup>.

Although BIs have been implemented primarily targeting alcohol consumption, the focus on other types of drug consumption, such as cannabis and tobacco, is increasing. Research has demonstrated BIs' effectiveness at preventing and reducing drug use among adults and young adults but especially among adolescents<sup>[15-25]</sup>. Studies have also shown significant benefits in multiple settings<sup>[15,20,26]</sup>. However, these findings are not without controversy. Although results in general benefit BIs, most summary effects are small<sup>[16,22]</sup>. In particular, their efficiency linking individuals to specialized treatment units is unclear and the consumers' generalization or spillover effects to other untargeted substances remain ambiguous<sup>[17,24,27]</sup>.

## BRIEF INTERVENTIONS FOR ADOLESCENTS

Addictions have a latency period (time between first use and the development of addiction). This period depends on vulnerability factors or contextual factors, it differs by gender, and it highlights the early initiation of consumption as a risk factor<sup>[28-30]</sup>.

It is during this latency period, prior to taking the form of a problematic pattern of consumption, where Screening, Brief Intervention and Referral to Treatment (SBIRT) has shown their utility<sup>[24,31]</sup>. Meta-analysis conducted of BI on adolescents have shown that they are effective in preventing the initiation of drugs use, reducing the future drug misuse and providing referrals to supportive services<sup>[17,24,25]</sup>. Adolescence is a sensitive developmental period where this latency phase is shown as an opportunity. Research has suggested that younger consumers are more likely to successfully quit and reduce drug use than older participants<sup>[31]</sup>.

Thus, there is no denying that BI is one promising approach to address adolescents substance use. It is unclear, however, if BI can also affect other risky behaviors, regardless of whether those are targeted in the intervention or not. There is inconsistent empirical evidence of generalization effects among other risky behaviors. In this regard, Hale et al.<sup>[32]</sup> meta-analysis found support for the effectiveness of interventions targeting multiple risk behaviors among adolescents like alcohol and other drugs consumption, aggression or sexual risk behaviors. However, these results have not been corroborated by Hennessy et al.<sup>[24]</sup> meta-analysis regarding brief alcohol interventions and their relation with tobacco use. These authors suggest that effective alcohol BI is not associated with a significant decrease in tobacco use, whether it is directly targeted or not.

Tanner-Smith et al.<sup>[17]</sup> meta-analysis was promoted to shed some light to the matter over whether BI may have spillover effects on other illicit drugs outcomes. The authors systematically reviewed available literature regarding BIs for adolescents and young adults (from 11 to 25 year olds or samples of college students no older than age 30) which evaluate BI targeted alcohol use or both alcohol and an illicit drug use, and its consequences. Subsequent to synthesizing findings from 30 study samples reported in 67 documents, the meta-analysis conclude that BIs targeting both alcohol and illicit drugs are effective in reducing use of these substances, but not the untargeted ones. It seems necessary further research to identify which factors are related to the spillover effects among adolescents.

As has already been stated, the prevalence of pediatric emergency visits related to drug use has increased. Since adolescent users are not usually aware of the seriousness of their consumption and tend to normalize substance use or minimize its consequences, there is the possibility to turn visits to child and adolescent psychiatric Emergency Departments into an opportunity to detect and steer this problem and integrate the patient into a mental health care network<sup>[33]</sup>. It seems necessary to implement BIs focusing patients with risky consumption patterns.

These interventions should accommodate the six key aspects suggested by the NICE guidelines. However, as a concrete population and context, it could be interesting to find out which specific components are most useful. Walton et al.<sup>[23]</sup> have

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analyzed which components of BIs, after their implementation in the Emergency Departments, are positively associated with reducing risky drinking behaviors. Those components were: greater identification of personal strength, protective behavioral strategies, benefits of change and alternative activities involving sports.

## NURSE-CONDUCTED BRIEF INTERVENTIONS

As the largest component of the healthcare workforce, the preparation of nurses as therapist for screening and BI may be the key to the solution. In a pioneer systematic review, Joseph determined that Nurse-Conducted Screening and Brief Intervention (NCSBI) is as efficient as BI delivered by physicians; being an effective strategy to address individuals with unhealthy patterns of alcohol use<sup>[26]</sup>. Nurses can make a significant impact in reducing substance use in a broad range of settings, including Emergency departments where it is specially required, as explained above, but where more research is needed.

These findings provide support for developing these interventions in Emergency Departments settings, but a range of barriers have been identified<sup>[23,34]</sup>. The main one seems to be the low training rates of professionals who carry out the detection and intervention programs. In Pediatrics, this training should address the detection of adolescent drug use, its consequences and the promotion of necessary skills for the intervention on patients with dual diagnosis. There should also be a focus on dyad substance consumption and externalizing disorders, because they are the most common users of emergency care settings and therefore could be the greatest beneficiaries from BIs<sup>[7,11]</sup>.

## CONCLUSION

Considering the increase of drug consumption related emergency visits among adolescents and young adults interventions directed to reduce drug use are an important priority. BIs have shown their effectiveness in achieving this goal in multiple settings. Taking into account that the majority of studies use adult samples targeting alcohol, studies conducted in an adolescent population are needed. Emergency Department visits provide the opportunity to identify drug consumption patterns and may afford access to BI also in adolescences, being nurses' involvement an important component in the achievement of this objective.

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