



Screening, brief intervention and referral of emergency department patients with unhealthy drug use: efficacious or not?

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WHAT IS ALREADY KNOWN ON THIS TOPIC

There is evidence that emergency department (ED) screening, followed by brief intervention and referral to treatment can reduce high-risk behaviours such as unhealthy alcohol and tobacco use.¹ The evidence supporting the efficacy of Screening, Brief Intervention and Referral to Treatment (SBIRT) for drug use in ED settings is limited, yet promising.²

METHODS OF THE STUDY

This is a clinical trial of ED patients 18 years or older who screened in for problematic drug use measured by a score of ≥ 3 on the 10-item drug abuse screening test. Patients were randomised to: (1) brief intervention with up to two telephone boosters within 7–30 days of the ED visit (BI-B): $n=427$; (2) screening and assessment with referral to treatment if dependent as measured by ASSIST scores ≥ 27 (SAR): $n=427$; (3) minimal screening only (MSO) with information pamphlet: $n=431$. The study was conducted at six US hospital from October 2010 to February 2012. The patients were followed for 3, 6 and 12 months. Primary outcomes included self-reported days of 'patient-defined' primary drug use during the 30 days preceding follow-up.

WHAT DOES THIS PAPER ADD

- ▶ ED patients who use illicit substances or misuse prescription drugs have moderate-severe use disorders. The mean (SD) Dast-10 score was 5.8 (2.3), with 652 (51%) of participants scoring ≥ 6 ; and the mean (SD) days of use during the past 30 days was 16.2 (11.6).
- ▶ A brief intervention with two boosters was no more efficacious than minimal screening. The primary outcome, estimated differences in number of days of use, (95% CI) was reported MSO versus BI-B, 0.72(–0.80 to 2.24). There were no differences between groups either in days reported using the primary drug, using any drug or heavy drinking at any follow-up time.
- ▶ Sex, race, ethnicity and type of substance used did not modify the effects of treatment.
- ▶ Adherence to interventions that involve on-going contact may be modest.

LIMITATIONS

- ▶ Sample was largely unemployed, poor, non-acutely ill or injured patients. Many noted cannabis as their primary drug of use; the majority were on the severe end of the spectrum of use disorders (ASSIST scores of ≥ 27).
- ▶ By eliminating the highest triage levels, this may introduce a selection bias by excluding patients with a disproportionate prevalence of illness or injury related to substance abuse.
- ▶ All patients, regardless of type of drug or intensity of use, were included and received the same intervention. For example, a patient using marijuana on some days was treated the same as one who uses heroin, cocaine and marijuana daily.
- ▶ Primary analysis focused on patient's defined primary drug. Patients often use multiple drugs and this may confound results.
- ▶ There was a significant difference at baseline on days of use across the groups (2 days) that must be controlled for in the analysis.
- ▶ Adherence to the BI-B arm was modest: 57% received the first booster and 39% the second, therefore the intervention to be tested was not delivered to many patients.

- ▶ Hair analysis is limited in detecting reduction in drug use; baseline and 3-month data may be similar and not likely to show a difference over this time period.

WHAT NEXT IN RESEARCH

This multicentre study of three approaches to ED-initiated interventions for substance use did not demonstrate an effect from screening and intervention for drug use. The data, although disheartening, do not suggest that all ED-initiated interventions for unhealthy drug use lack efficacy. It is unlikely that one intervention will work for all types of drug use and intensity of use. Because of the profound neurobiological and behavioural changes that characterise severe use disorders, it is likely that more potent interventions combining behavioural approaches with ED initiation of pharmacotherapy will be needed to produce sustained abstinence. These interventions may include ED-initiated treatment such as buprenorphine for opioid dependence,² or nicotine replacement therapies for tobacco dependence,¹ with referral to either community substance treatment programmes or office-based practice.

A more nuanced view may be needed to assess the efficacy of brief interventions for substance use in ED settings. The primary substance, degree of severity, primary end point and treatment approach are likely all important moderators of treatment effect. For example, studies of SBIRT for unhealthy alcohol use tend to exclude individuals with severe alcohol use disorders and use reduction in drinking as the primary outcome measure. Using this harm reduction end point, the evidence suggests behavioural interventions alone may be adequate to reduce drinking. For individuals who use illicit drugs, often with co-occurring substance use, abstinence may be the desired outcome; thus a more aggressive approach that incorporates early initiation of pharmacotherapy may be needed. Future research might explore which approaches are more efficacious for specific substances.

DO THESE RESULTS CHANGE YOUR PRACTICES AND WHY?

The ED visit offers a unique opportunity for screening, treatment initiation (psychosocial and/or pharmacotherapy) and referral for continued care. Since the burden of disease is high, this one negative study should not minimise the current ongoing efforts to screen and intervene with drug problems in ED settings. Further research should focus on developing and implementing interventions for specific drug types and intensity of use. We suggest a new paradigm, similar to that used for other chronic diseases like hypertension, diabetes and asthma, in which emergency physicians initiate pharmacological treatment and referral for patients with drug problems.

Competing interests None declared.

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