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▶ Screening, Brief Intervention, and Referral to Treatment (SBIRT): 12-month outcomes of a randomized controlled clinical trial in a Polish emergency department.

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The first European trial of an emergency department brief alcohol intervention being implemented nationally in the USA found no significant impacts either short term or a year later, but in Britain and elsewhere, different types of interventions have worked.

Summary In addition to the featured report of outcomes 12 months after the intervention, this analysis draws on a similar report at three months.

Conducted in Sosnowiec in Poland, the featured study was the first outside the USA to test an intervention being promoted nationwide by the US government to identify hazardous substance use in primary care and non-specialist community settings and offer brief advice or referral to treatment. The elements of the intervention – Screening, Brief Intervention, and (if appropriate) referral for Treatment – compose the intervention's acronym, 'SBIRT'. The Polish research site was the country's first centre to offer comprehensive hospital-based emergency services to patients suffering traumatic injuries, servicing an area typified by infrequent but very heavy drinking among men.

At the centre adult patients attending from late afternoon to midnight were asked by a researcher to complete a screening survey to identify problem and/or at-risk drinking. Those who screened positive and could provide at least two contacts able to help trace them were asked to join the study. Of 2815 patients, 1913 were screened of whom 494 screened positive and 446 joined the study, nearly 9 in 10 men. All 446 patients were given a list of local AA groups and alcohol services.

Twelve months later researchers were able to assess the drinking and related problems of 62% of the 446 patients. Of these, 14 had initially been drinking very heavily (over 84g per day); they were excluded from the analysis to even out the drinking profiles of

the three groups, and because brief interventions were thought most suitable for nondependent drinkers.

Between initial screening and final assessment, the patients had been randomly allocated to one of three procedures in ascending order of the intensity of assessment and advice:

- screening-only patients were not offered an intervention nor further assessed until the 12-month follow-up point, a baseline against which to assess the impact of being assessed without intervention (next group) or also being offered the SBIRT intervention (last group);
- additionally, patients assessed without intervention were subject to a comprehensive assessment of their drinking and related problems, the relation between drinking and their medical emergency, readiness to change drinking, and some personality variables which might affect how patients react to intervention; an interim follow-up assessment was made three months later;
- additionally, intervention patients were offered (all but two accepted) 15 to 20 minutes of advice from specially trained emergency department nurses using the SBIRT protocol, generally delivered while patients were waiting for treatment in the department.

The SBIRT protocol featured a 'Brief Negotiated Interview' intended to reduce unhealthy alcohol use. Based on motivational interviewing, during this highly scripted session, nurses first fed back to the patient the results of the screening tests and expressed concern at their risky drinking, then sought to enhance motivation to cut back using motivational techniques such as exploring the pros and cons of drinking as the patient sees them, and reframing and reflecting back to the patient some of their own responses. The session was planned to end with nurse and patient signing a 'prescription for change' committing them to the drinking goals decided during the preceding discussion. Though all patients were given a list of local services and mutual aid groups, for intervention patients this also provided an opportunity to motivate dependent drinkers to seek further help.

Main findings

A year later the proportion of patients in each group drinking over the study's at-risk levels had declined among followed up patients from 87–88% to 54% among those only screened, and 64–65% among those further assessed and/or offered advice. These declines did not differ to a statistically significant degree across the three intensities of assessment and intervention, and neither did any of the more detailed measures of drinking frequency and intensity or related problems.

The intervention group had, however, more clearly reduced the number of days they drank per week, their maximum intake on one day, and their symptoms of dependence, largely because they started the study at higher levels rather than because they ended it at lower levels than patients not offered intervention. These declines meant that only the intervention group improved on all the variables assessed by the study. They also further improved between the three-month and 12-month follow-ups on more indicators than the other two groups.

Just five patients of whom two were offered SBIRT advice sought treatment for their drinking problems over the year of the follow-up. Over the entire year this lack of follow-on treatment may have been partly due to exclusion of the heaviest drinkers from the

analysis, but this seems to have been a minor factor; even including these patients, at the three-month follow-up just one patient had started treatment.

The earlier report of outcomes three months after patients attended the centre also found that drinking and related problems had not declined significantly more among patients offered the SBIRT intervention and/or who underwent full assessment. Neither were there any clear patterns of patients benefiting more from the intervention if (among other things) they were more or less motivated, severe in their drinking, prone to risk taking, or attributed their injury to drinking.

The authors' conclusions

Despite there being no statistically significant differences between how far the three groups of patients reduced their drinking and related problems, the declines were more consistent in patients offered the SBIRT intervention and more often continued between the three-month and 12-month follow-ups, suggesting that the intervention had some beneficial impact. Without intervention, the relatively intensive research assessments did not further contribute to improvements beyond whatever impact brief screening may have had. Lack of impact of the intervention may have been related to the pattern and severity of drinking in this Polish sample, typically drinking very heavily occasionally rather than heavily frequently.

finding is that on none of the drink-related variables had the SBIRT intervention led to significantly greater positive change. Apart from the explanations advanced by the authors, it seems possible that in the Polish context, the novelty – perhaps even the shock – of being asked about one's drinking in an emergency service and outside the context of alcoholism treatment was sufficient to create most of the reduction in drinking likely in a social environment supportive of heavy male drinking.

By training the hospitals' own emergency staff to conduct the intervention rather than relying on 'imported' specialists, the study went part way to testing a more real-world implementation of brief interventions than most other studies, but still the screening element was conducted by research staff. When hospital staff are relied on, unless they are motivated and committed, few people who might benefit from intervention are identified. Further distancing the study from routine implementation was the fact that the trial site was the country's first top-level trauma centre rather than typical emergency service sites, and the degree of training and supervision offered to the nurses conducting the intervention. These efforts suggest that failure to adequately implement the intervention was not a significant factor in the findings, or that if it was, inadequate implementation would be even more of an obstacle in routine practice.

These disappointing results follow similarly null findings at the six- and 12-month follow-ups in the major US trial of the same intervention. The main difference is that in the US study there were transient but clear beneficial impacts at the three-month follow-up, which meant that 26% of SBIRT patients no longer exceeded US low-risk alcohol consumption thresholds compared to just 17% of patients not offered this intervention.

These reports from large-scale US and European studies underline the fragility of the evidence base for emergency department brief alcohol interventions, which are best seen as having an established potential for curbing drinking and injuries, but one

inconsistently realised.

The heavy episodic drinking of the patients in Poland was thought possibly to account for their lack of response to intervention. In this respect they seem no less extreme than patients in two British randomised trials (1 2) which did find significant reductions in drinking among patients up to a year later, but the British patients were also heavy regular drinkers and many were probably dependent. In Poland early results from the US trial led the authors to exclude very heavily drinking patients, but later results showed such patients did not differ in their response to the brief intervention, and other studies have found these patients respond best. However, so few patients were excluded on this basis that it seems unlikely that their exclusion explains the null results in Poland. Another difference is that in both British studies, intervention involved referral to the hospital's alcohol specialist for what may have been brief treatment rather than just a brief intervention. In both many more attended for this further support than in Poland.

In the UK these studies have established the potential effectiveness of referring very heavily drinking patients for brief interventions or brief treatments by specialist nurses based at the same hospital as the emergency department the patients were seen at. The problem remains however of how to engineer consistent implementation of such initiatives which intervene with more than a fraction of the potential caseload. For more on this issue, on the UK policy context, and on UK studies, see this Findings analysis. For all Findings analyses of brief alcohol interventions in emergency departments, run this search.

In the UK advice on brief interventions is available from the Alcohol Learning Centre. US guidance is available on the specific intervention used in the featured study and on emergency department alcohol screening and intervention in general.

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