Does active referral by a doctor or 12-step peer improve 12-step meeting attendance?

Results from a pilot randomised control trial.

Manning V., Best D., Faulkner N. et al.


In the context of current UK policy, this is a key study, testing the ambition to extend recovery beyond formal treatment by systematically linking patients to mutual aid groups, the main way it is being suggested commissioners can square the circle of doing more (recovery is seen as a whole-life transformation) with less.

SUMMARY Linking patients to mutual aid groups while they are still in treatment is one way to combine professional and peer support, a combination associated with better long-term outcomes than either alone. However, few substance users in the UK attend these groups and attendance is generally short-lived.

Studies have examined whether mutual aid groups based on the 12 steps of Alcoholics Anonymous can more assertively be linked to during treatment through systematic encouragement which promotes continuing post-treatment attendance. However, the studies have all been conducted in the USA; extending research to the UK is important because low levels of staff engagement with and experience of mutual aid groups, and anxieties about philosophy, compatibility and patient safety, have made pathways to mutual aid groups particularly problematic in the UK. Also, few studies have focused on the extent to which attendance and outcomes can be improved by someone who has themselves used the groups to aid their recovery.

The featured study addressed these gaps in research by investigating whether attendance at 12-step mutual aid groups can be facilitated by proactive and systematic encouragement from a doctor or mutual aid group member ('peer-referral') while patients are undergoing inpatient detoxification. The expectation was that both would elevate attendance after discharge, but that (because of the sharing of experience) peer-referral would be most effective, and consequently lead to the highest proportion of patients sustaining abstinence.

To test this expectation, this UK study recruited 151 alcohol or drug dependent patients admitted for a 10–14-day inpatient detoxification to a specialist NHS ward in London. Nearly 57% were being detoxified primarily from alcohol and 38% opiates. Typically they were single, unemployed men. Nearly three quarters had at some time attended a 12-step group at least three years in to their own recovery from substance use problems.

After agreeing to join the study, patients were randomly allocated to three different referral procedures. The control group were given a list of the meetings to be held on the ward, and doctors and peer-referrers were asked not to talk to them about the interventions being tried with other patients. Just before they left the unit they were also given a questionnaire assessing affiliation to 12-step groups indicated that generally this was weak.

Patients were asked to join the study on the second days of their stays. On the same day those who agreed (only 11 refused) completed baseline research assessments. This schedule left time for the interventions over the next couple of days, and enough time after that for up to eight 12-step meetings to be attended during their remaining stays. To track their substance use and meeting attendance, all but 30 who left the ward early were re-assessed just before their discharge, and all but 25 two to six months after their discharge.

After agreeing to join the study, patients were randomly allocated to three different referral procedures. The control group were given a list of the meetings to be held on the ward, and doctors and peer-referrers were asked not to talk to them about the interventions being tried with other patients. Just before they left the unit they were also given a list of meetings in their home areas and offered 12-step literature.

Additional to these steps, another set of patients saw a doctor trained by the researchers to systematically encourage attendance after discharge, but that (because of the sharing of experience) peer-referral would be most effective, and consequently lead to the highest proportion of patients sustaining abstinence.

A third set of patients were offered a similar discussion, but this time with an active member of a 12-step mutual aid group at least three years in to their own recovery from substance use problems.

Guidelines for the discussions differed only in that doctors gave examples of how 12-step groups had helped other patients, while peers spoke of how the groups had aided their own recovery.

Primarily at issue was whether (relative to the control group) the doctor- and peer-referral procedures increased attendance at 12-step groups at the hospital during the patients’ stays and in the two to three months after they left. At this final interview, patients were also asked the about their substance use. Because appropriate to 12-step philosophy, abstinence from the substance in relation to which they were being treated was adopted as the indicator of a positive outcome.

Main findings

The general picture (chart) was that being encouraged by either a doctor or a peer (especially the latter) substantially improved attendance at 12-step groups, but resulting impacts on abstinence were much smaller and not statistically significant.

Of those who could be interviewed before discharge, across the three referral procedures there was no significant difference in the proportions of patients who had attended meetings during their stays (controls 73%; doctor-referral 97%; peer-referral 99%) nor in the average number of meetings attended (just over eight in controls compared with nine and 11 in the peer and doctor groups). There were no significant differences in these respects at two to three months after discharge, but in both cases the 12-step group was clearly showing a helpful impact.

At this final interview, patients were also asked the about their substance use. Because appropriate to 12-step philosophy, abstinence from the substance in relation to which they were being treated was adopted as the indicator of a positive outcome.
Of those who could be interviewed, over the two to three months after leaving the inpatient unit nearly half had attended at least one meeting, disproportionately the same patients who had attended while at the unit. Across the three referral options these proportions significantly differed; in the lead at 64% was peer-referral, followed by 48% referred by doctors and just 33% of the controls merely given a list of meetings. Again, significantly more of the combined referral groups attended than did the controls. The same order was seen in the average numbers of meetings attended: 13 after peer-referral; 8 after encouragement from a doctor; and 5 among the controls.

Focusing on patients who before being admitted to the inpatient unit had never attended a 12-step group, after leaving none of the controls attended a meeting, but about half those actively referred. Among these previous non-attendees, the doctor persuaded twice as many as the peer-referrer to give the groups a try after treatment.

Of those re-interviewed, about 40% of the patients said they had not used their main problem substance between leaving the unit and the follow-up interview on average two and a half months later. This figure did not significantly differ across the three referral options, though again at 44% in the lead was peer-referral, followed by doctor-referral (41%) and the controls (36%). After whichever referral option, particularly likely to be abstinent were patients who attended groups after leaving the unit; of these 61% said they had not used their main problem substance compared to just 39% of non-attendees.

The above analyses were done effectively on the assumption that despite some loss to follow-up, randomisation had evened out pre-existing differences between the patients allocated to the three referral options. A different kind of analysis instead adjusted for any such differences in how strongly patients were affiliated to 12-step principles, number of times they had been detoxified in the past, desire for help, and whether they were being withdrawn from alcohol or from other drugs. When the referral option was entered in to this mix, having been referred by a peer was the strongest predictor of post-discharge attendance at a 12-step group, raising the odds of attending by nearly four times. However, in a similar analysis, referral option was unrelated to post-discharge abstinence.

**The authors’ conclusions**

In line with earlier research, in the UK active referral and encouragement from a doctor or (especially) a peer during treatment increased post-discharge attendance at 12-step meetings. Whilst peer-referral had the stronger impact overall, the benefits of doctor-referral must not be underestimated, in particular with people with no previous experience of 12-step groups.

These and other findings (including that patients whose start attending 12-step groups immediately after leaving treatment attend longer and more frequently) suggest that treatment services should consider arranging AA/NA meetings in the treatment setting and actively encourage attendance using peers, doctors, or potentially any staff member. On-site meetings are an effective, low-cost strategy that could be made available within every treatment service in the UK.

Lack of a greater impact of referral strategy on post-discharge abstinence may have been due to the follow-up period being too brief for these effects to emerge. These impacts may be generated after sufficient exposure to positive role models and the solidification of a recovery network which encourages rewarding activities other than substance use. In the inpatient setting it was not possible to prevent patients allocated to active referral discussing their experiences with patients in the other intervention groups, perhaps even themselves acting as informal peer advocates for 12-step attendance.

**Findings commentary**

In the context of current policy in the UK, this is a key study, testing the ambition to extend recovery from addiction beyond formal treatment by systematically encouraging patients to engage in 12-step mutual aid groups. With resources tightening and likely to tighten further, the free resource of mutual aid is seen as the main way commissioners and services can square the circle of doing more (recovery is seen as a whole-life transformation) with less.

The results do offer some encouragement. A brief intervention which could be conducted by peer volunteers substantially improved attendance at 12-step groups. Though falling short of statistical significance, the smaller increase in the proportions abstinent might (if further studies suggest it was not a chance finding) be considered clinically worthwhile, especially if associated with broader reductions in substance use and wider quality of life gains. As the authors suggest, it might also have been a harbinger of greater long-term improvements. There are indeed good reasons (see below) for suggesting that given the nature of the study, whose prime focus was on group attendance, it is not surprising that it was unable to show a statistically significant impact on substance use, even there really was such an impact or would have been in the longer term.

However, a small single study almost inevitably leaves too many ‘ifs’ and ‘maybes’ to provide solid research support for the policy push for a substantially greater use of 12-step group attendance. In particular, from this study we cannot say whether structured, manualised encouragement based on three half-days of training was needed to boost attendance, or whether routine, simpler and less structured encouragement would have worked as well.

The authors argued that the inpatient environment meant enthusiasm for 12-step attendance generated by the doctor- and peer-referrers could easily have spread to the control group, boosting their attendance, and reducing the gap between them and the actively referred patients. On the other hand, the instructions to doctors in particular “to avoid discussing the contents of the intervention” with control patients may have deprived them of the normal degree of encouragement to attend. The study’s substance use outcome measure – abstinence from the drug the patient was detoxified from – seems the key one from the point of view of the detoxification service and perhaps too the patients. Readers approaching the study from a 12-step perspective might want to know whether abstinence extended to all psychoactive substances, while others might wish to know whether the interventions led to different degrees of reduction in substance use and related problems from before treatment, often used as a yardstick for treatment services. Conceivably these measures would have created different impressions of the effectiveness of the interventions.

**Attendance boosted more than abstinence**

A feature of the findings is the contrast between the substantial impact active referral had on post-discharge attendance at 12-step groups and the much smaller and statistically insignificant impact on abstinence over the same period.
Nearly two-thirds of the peer-referred patients who could be re-interviewed attended groups, proportionately nearly double the number from the control group merely given a list of meetings. Moreover, on average they attended over a meeting a week, nearly two and a half times more than control group patients. Yet this extra contact resulted in proportionately just 24% more sustaining abstinence from their main problem substance, too small a difference to be confident it was not due to chance. These figures exclude patients who could not be reassessed. If the assumption is made that missing patients both did not attend groups and did not stay abstinent, the picture changes little; proportionately 98% more attending but just 27% more abstinent.

This contrast calls in to question whether post-treatment 12-step attendance ‘artificially’ elevated by special efforts during treatment has a substantial impact on whether the patient later remains abstinent. Instead the pattern of outcomes seems more consistent with 12-step attendance being a marker of ability and determination to sustain abstinence. It could be that people who ‘naturally’ (ie, without being systematically encouraged to attend) feel they need this support and seek it out would not do as well were it unavailable, but in Britain they are a minority. Many of the rest can be encouraged to attend and presumably get something out of it (see below), but in terms of whether they sustain abstinence, from this study alone it cannot be concluded that attendance is a major influence.

That assessment is however based on a study which trialled a very modest single-session intervention without follow-up sessions or escorts to meetings, and assessed its impact with a single, limited measure of substance use among a small group of patients from one unit over a short time period. The study could not and was never intended to provide a comprehensive verdict on what such interventions might be able to achieve in the UK.

The findings are reminiscent of the common pattern in treatment studies that retention and engagement measured by attendance are only loosely related to substance use outcomes, suggesting that what makes patients want to keep coming back to a service is not the quality of treatment per se (see this US control trial as an example) as much as their motivation to change, their substance use problems. Consequently it is possible (see this example) to substantially boost an indicator of one (eg, attendance) without correspondingly boosting an indicator of the other (eg, abstinence).

Attending may be about more than abstinence

Even if an impact on substance use could not be proven by the featured study, it does seem that patients persuaded to try their local groups by the peer-referrers got something they valued from attending. Rather than going once or twice, many went twice, they went on average 13 times, many more than control patients not actively encouraged to attend. The peer-referrers (less so the doctors) modestly boosted attendance during treatment, but their main effect was to translate this convenient way of ‘tasting’ 12-step groups in to more patients also trying and then continuing to attend groups after leaving.

Encouraging attendance may be considered worthwhile in its own right, regardless of effects on substance use. Of the 101 patients who attended meetings during treatment, for 29 this was their first such experience. In itself this commends the combination of encouragement to attend plus the convenience of on-site meetings as way of introducing 12-step groups to patients, giving them the chance to make more informed decisions about whether to continue attending or to return to meetings at a later date.

Closest US study

Closest to the featured study was a US study which trialled control and intervention options both a step up in intensity from those in the featured study – standard (in US terms) encouragement to attend, versus more intensive referral featuring arrangements for a 12-step group member to accompany the patient to their first meeting. Despite the intensity of the intervention, the results were only modestly improved attendance and substance use and related problems. It was perhaps an indication of the difficulty of creating substantial ‘added value’ from 12-step groups in an environment where virtually all the patients were already familiar with them and the core treatment programme was infused with a 12-step orientation. In the context of the featured study, it might also have illustrated that 12-step group attendance is not always a substantial and essential driver of improved outcomes among patients who already motivated enough to seek and receive formal treatment.

In the UK where patients are less familiar with mutual aid groups, systematic encouragement to attend should have more scope to make a difference. The featured study suggested this was a valid expectation; the clearest impact of active referral (especially by doctors) was to persuade the roughly 30% of patients who had never been to meetings to give them a try after leaving the inpatient unit. Without active referral, and despite the convenience of on-site taster meetings, those among the control group who had not attended 12-step meetings before being admitted to the inpatient unit continued not to attend after leaving.

From the USA too we have evidence (see this Findings commentary) that patients with different degrees of prior experience of 12-step groups and affiliation to them react best to different degrees and styles of encouragement to attend, the more affiliated just needing a directive prompt, the less experienced and/or affiliated needing more extensive explanation and discussion. This suggests that typical US and UK patients will respond best to different types of interventions. British patients possibly needing more encouragement and explanation than offered in the featured study.

UK policy

The study addresses what is very much a live issue in UK addiction treatment policy, where commissioners of services try to balance the need for evidence-based practice against the more widespread belief in the value of self-help interventions as part of comprehensive treatment. The evidence base for the effectiveness of 12-step participation versus abstinence is substantial, but the evidence base for the effectiveness of interventions to improve this is modest. In the context of the featured study, it might also have illustrated that 12-step treatment is not always linearly related to substance use outcomes, suggesting that what makes patients want to keep coming back is more than just their motivation to change. In the UK where patients are less familiar with mutual aid groups, systematic encouragement to attend should have more scope to make a difference.
The study addresses what is very much a live issue in UK addiction treatment policy, where commissioners of services have been encouraged to consider building links to mutual aid groups into all local systems, and to ensure that each individual service has pathways to mutual aid groups. The featured study exemplifies and tests this suggestion, which came from the National Treatment Agency for Substance Misuse in 2010. That agency is now subsumed in Public Health England, which has summarised recent official and expert UK guidelines calling on treatment services to forge stronger links with mutual aid groups and promote these to those of their patients who are interested and might benefit. A sign of the importance attached to this strategy, in 2013 the agency also published a guide for keyworkers in treatment services on facilitating access to mutual aid, based on the intensive option trialled in the US study described above.

Thanks for their comments on this entry in draft to research author Victoria Manning of the National Addiction Centre in London, England, and Tim Leighton of the Centre for Addiction Treatment Studies in Wiltshire, England. Commentators bear no responsibility for the text including the interpretations and any remaining errors.

Last revised 18 February 2017. First uploaded 09 June 2014

**Top 10 most closely related documents on this site. For more try a subject or free text search**

**REVIEW 2009** Peer-based addiction recovery support: history, theory, practice, and scientific evaluation

**MATRIX CELL 2014** Drug Matrix cell D2: Organisational functioning: Generic and cross-cutting issues

**STUDY 2011** Transitioning opioid-dependent patients from detoxification to long-term treatment: efficacy of intensive role induction

**REVIEW 2014** Peer recovery support for individuals with substance use disorders: assessing the evidence

**STUDY 2015** Navigating the alcohol treatment pathway: A qualitative study from the service users’ perspective

**REVIEW 2014** Estimating the efficacy of Alcoholics Anonymous without self-selection bias: an instrumental variables re-analysis of randomized clinical trials

**STUDY 2010** Long-term outcomes of aftercare participation following various forms of drug abuse treatment in Scotland

**HOT TOPIC 2016** The therapeutic potential of patients and clients

**STUDY 2002** The grand design: lessons from DATOS

**REVIEW 2005** Self help: don’t leave it to the patients