



SMMGP CLINICAL UPDATE - JUNE 2009

Results from two randomized clinical trials evaluating the impact of quarterly recovery management check-ups with adult chronic substance users. *Scott CK et al. Addiction, June 2009, 104:6, 959-971*

This important paper examines the effect of proactive intervention towards recovery by implementing two new interventions: firstly, a quarterly 'Recovery Management Checkup' (RMC) for all participants, comprising manualised interviews to determine their engagement in treatment and fast-tracking into treatment for those who had disengaged, and secondly, Early Re-intervention (ERI) for treatment defaulters with a motivational interviewing approach to addressing ambivalence about treatment. This was a repeat of an earlier research protocol by this team; ERI-1 had taken up to 24 months to show a significant impact, so ERI-2 was an improved version with staff working to a tighter protocol of telephone contacts, face to face interviews and arranging transport for subjects to get to appointments. Subjects were largely African Americans, dependent on a variety of substances and generally complex, for example: new or expectant mothers, homeless or mentally ill people. They were randomised to receive RMC and ERI or usual care at treatment entry. Staff could not be blinded to which interventions subjects received, but strenuous efforts were made to ensure other variables were controlled. Results showed improved process outcomes, with significant improvements in numbers re-engaging, time to treatment re-entry and retention in treatment, and true outcome measures, with significantly more days of abstinence in the experimental group and fewer substance related problems. There was little difference in the rate of significant adverse events. Conducting RMC proved to be a feasible option, with >90% of participants being contactable. ERI-2 was shown to have much greater impact than ERI-1.

SMMGP comment : The introduction to this paper elegantly distils the evidence for the addiction model of a chronic condition marked by cycles of recovery, relapse and repeated treatment often spanning many years before reaching either stable recovery, permanent disability or death and *should be required reading for all those in the field.* Embracing the evidence changed the philosophy of treatment in this US centre – it meant abandoning the simplistic notion of a single episode of acute care leading to 'cure', with an expectation that defaulters would request treatment again when needed, but rather a chronic disease management approach, anticipating relapse and disengagement and proactively intervening to counter these problems. Many other studies also point towards the average number of episodes of treatment to be 3-4 over many years. We also found the comparison of chronic addiction with other chronic conditions and their success rates helpful. But it also comments that most addiction treatment, like most

health-care, is episodic, so 1) how should this change our practice and 2) which is the best setting for dealing with a long term condition?

1. We agree with the authors that a much more proactive approach needs to be taken to post-detox and rehabilitation aftercare in the UK: people should be encouraged back into treatment, not penalised (some areas are limiting rehab to one episode per person and in others discharged for use on top) and monitoring, such as a regular health check, should be encouraged even if people do not want counselling or substitute medication at that time.
2. Accepting that addictions tend to be long term strongly suggests that general practice could be the best place for treatment, where people stay registered wherever they are on their journey but embrace the notion that the condition is episodic in nature and access to high-intensity support at times of relapse could be beneficial. All in all it would seem that primary care based substance misuse treatment with good referral pathways in and out of specialist treatment, if required, is the ideal model of care for many, if not most, clients.

Prevalence and clinical relevance of corrected QT (QTc) interval prolongation during methadone and buprenorphine treatment. *Anchersen, K, et al. Addiction, June 2009 104:6 p993*

Since the 2007 Clinical Guidelines advised ECG monitoring for those on high dose methadone, because of the risk of prolongation of the QTc interval which is associated with the potentially fatal abnormal cardiac rhythm Torsades de Pointes, there has been controversy on the evidence base for this recommendation. How common is methadone-induced QT interval prolongation and is it clinically relevant anyway?

This study undertook prospective QTc assessment by ECG in 200 patients entering opiate substitution treatment (OST) in Norway over a 10 month period. QTc prolongation was directly related to dose of methadone, but there was no association with buprenorphine dose. All patients with QTc intervals of >500milliseconds (ms) were on doses of 120mg methadone or more. No patients on buprenorphine had QTc intervals>450ms.

A further retrospective arm of the study identified 90 deaths that had occurred in patients on OST by cross-matching the patients on the OST register with the death certificate register for a 7 year period. Their records were examined closely to find those for whom QTc interval prolongation could not be excluded as a cause of death: the maximum mortality attributable was 0.06 per 100 patient-years.

SMMGP comment: It is useful to have further evidence of the safety of buprenorphine. This study would also appear to confirm the association between methadone dose and QTc interval prolongation, but probably the most striking message from this research is the low death rate – the mortality figure offered here translates into a maximum of only 1.2 patient deaths caused by methadone-induced QTc prolongation for every 20,000 in treatment for 1 year. Given this, it seems reasonable to restrict the use of labour-intensive ECG monitoring to those on higher doses (>100mg). However, the interaction of drugs such as gabapentin and ciprofloxacin come up in numerous reports, (including 5 of Krantz's original series of 9 addiction cases) and the threshold for monitoring should be lowered in those co-prescribed methadone with other QTc interval-prolonging drugs.

A preliminary study of the population-adjusted effectiveness of substance abuse prevention programming. *Shamblen SR, et al. Journal of primary prevention, 2009, 30 89-107.*

This US study was designed to address the question of whether efforts to prevent substance misuse, generally amongst young people, are best targeted at high risk groups or implemented across the population as a whole. A new statistical tool was used to calculate an overall 'effect size' quantifying the impact in terms of amounts consumed across the population as a whole and allowing results to be compared between the different types of programme. 102 programmes were analysed. The results showed a trend towards a larger impact on the population as a whole if programmes are universal for tobacco and cannabis, but not for alcohol, where targeted programmes achieved greater drinking reductions across the population as a whole.

SMMGP comment: It is helpful to understand that there is no 'one size fits all' approach that is most cost effective in substance misuse prevention. Programmes need to be tailored to the individual drug and population type being targeted. There is a danger of widening health inequalities in this slightly simplistic view of effectiveness: even if a universal programme reduces consumption as a whole more than a targeted intervention, it may not be reaching those most in need.

Economic evaluation of delivering hepatitis B vaccine to injection drug users. *Hu, Y, et al. Am J Preventative Medicine, 2008, 35(1) 25-32.*

This study was designed to determine the most cost effective way of giving hepatitis B vaccine to drug users. 1,964 injecting drug users were recruited at needle exchanges and offered hepatitis B screening tests, of which 860 proved to be non-immune. 595 of these returned for their first Hepatitis B immunisation, and at this point they were randomly allocated to a rapid (doses 2 and 3 at one month intervals) or standard (dose 2 at one month, dose 3 at 6 months) schedule. Final assessment was at 7 months after first dose. Further blood tests before last dose and at final assessment established whether immunity was successfully achieved. Results showed that the rapid schedule improved completion rates over standard schedule. Mathematical modelling took into account the effect of vaccinating at the first visit rather than waiting for the results, and the healthcare costs of hepatitis B infection. This showed that, given US rates of existing immunity and rates of new infection, (which are similar to those in the UK) any immunisation schedule would produce cost savings, but the combination of starting immunisations before results were obtained, and using the rapid schedule would have been the most cost-effective.

SMMGP comment: These findings validate current RCGP recommendations - see http://www.rcgp.org.uk/PDF/drug_hepAB.pdf

The study shows that needle exchanges have a valuable contribution to make in improving vaccination rates, often being the first point of contact for the cohort at highest risk, with frequent return visits. This is in line with NICE recommendations that all specialist needle exchanges should offer Hepatitis B testing and vaccination - <http://www.nice.org.uk/guidance/PH18>

A systematic review of emergency care brief alcohol interventions for injury patients. *Nilsen, p, et al J Subs Abuse Trtmnt 2008 :35 184-201.*

This review aimed to assess the impact of alcohol brief interventions for injured patients attending accident and emergency departments. 13 European and US studies which randomly allocated a proportion of injured patients to receive brief interventions in addition to emergency care were found. The studies were quite diverse, but in general all patients, including controls, showed some reduction in drinking, but intervention cohorts showed a significantly larger improvement about half the studies. The majority of studies also found significant improvements in one or more other outcomes: risky drinking, alcohol-related negative consequences and injury frequency, with better results for more intensive interventions.

SMMGP comment: A&E settings are likely to provide fertile ground for alcohol interventions, as this review suggests, but there is a need for more consistent research protocols and for proof of cost-effectiveness before such work is likely to be widely commissioned.

The effectiveness of brief alcohol interventions in primary care settings: a systematic review. *Kaner E.F.S., et al Drug and Alcohol Review:2009, 28, p 3010-323* (We were alerted to this study by the Effectiveness Bank, an excellent service provided by the Drug and Alcohol Findings project. To subscribe or for further information see www.findings.org.uk/)

It is confirmed that brief advice to risky drinking in primary care can reduce drinking but doubt remained whether this could be translated into normal practice, This Cochrane Collaboration systematic review combines findings from randomised trials and aimed to assess the effectiveness of brief interventions in primary care and to determine if outcomes differed between the more tightly controlled 'efficacy' trials, and the more real-world tests characterised as 'effectiveness' trials. Most trials compared outcomes for these patients after brief intervention against a control group which was only assessed, treated as usual, and/or provided written information.

The primary meta-analysis combined alcohol consumption outcomes from 22 trials and over 5800 patients. One year later, patients who had received a brief intervention (real world type) drank significantly less than controls, nearly five units per week. Extended intervention (20 minutes lifestyle) was associated with a greater reduction in alcohol consumption compared with brief intervention, but the difference was not statistically significant. The authors concluded that brief interventions can reduce alcohol consumption in men, with benefits evident a year after intervention; they are unproven in women, for whom there is insufficient data. Since extended treatment had little extra benefit, primary care intervention for alcohol risk-reduction can be both brief and effective.

SMMGP Comment: This review confirms that brief interventions (rather than just asking patients about their drinking) lead to greater reductions in drinking among risky drinkers and can work in normal routine general practice - so lets all sign up for the RCGP Alcohol Certificate and improve our techniques!