# Castle Craig Clinic

# ECU Follow – Up Study 1999

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This report provides a description of alcohol dependence, treatment philosophy and briefly reviews why in-patient treatment is both indicated and effective. I attempt to look at some mediators and moderating effects of treatment with an emphasis on a particular study group. The report goes on to describe the demographic characteristics of a group of UK patients treated at Castle Craig and finally presents an evaluation of treatment outcome. This is done by means of clinical follow-up which does have methodological limitations but remains the commonest method of evaluation.

The group chosen consisted of 96 patients who were specifically selected by virtue of either still being employed or at least their life partners were. In effect this represents a selected group but as will be seen from later data they were otherwise severely affected by their alcohol dependence.

The precise cost of alcoholism and other forms of drug dependence are difficult to measure directly although some parameters such as lost production at work and the cost of medical services are readily measurable. From the perspective of the still employed alcoholic, continuing drinking results in increased absenteeism, lowered productivity and a reduction in the quality of services. Alcohol plays a significant role in accidents in the workplace. Social costs and the cost to the criminal justice system are even more difficult to quantify. The cost of alcoholism (not including other drug problems) has variously been estimated to be 2-6% of the Gross National Product.

While this report is not intended to be a comprehensive review of different treatment philosophies or a comparison of in-patient versus out-patient treatment, the data does show, 70% of this follow-up group had already received both out-patient treatment, counselling and an in-patient detoxification in the 2 year period before referral to Castle Craig.

In a paper published by Walsh et al, 2 mandatory referrals from an employee-assistance programme were randomly assigned to in-patient treatment followed-up by AA attendance or attendance only at an AA group (in both groups AA attendance was compulsory). The study provided some considerable evidence for the superiority of the in-patient plus AA group, particularly in terms of more clients

achieving continuous abstinence. A total of 46 subjects (23 per cent) reported an unbroken record of abstinence at every follow up interview during the 24 months of the study. Thus one moderator (i.e. a patient characteristic) predictive of good outcome may be that of still being in employment. Hence the interest in this particular group which at least in terms of being employed is not representative of the patients treated in this facility many of whom display higher levels of psychopathology, longer histories of dependence, vastly higher levels of polydrug dependence and abuse and have much lower levels of social and interpersonal functioning - patient moderators traditionally associated with poorer treatment outcomes - at least when outcome is measured solely in terms of abstinence. However, where treatment effectiveness is also measured in terms of looking at a reduction of health care costs, lowered crime rates or assisting people to move from living on benefits to gainful employment then results of studies from California 3, Oregon 4 and Ohio 5 have shown six dollars of savings in these areas mentioned for every dollar spent on treatment.

In this study group, there was no control group or random patient assignment which does mean it is not "strictly scientific" to make inferences concerning the role of treatment in any reported outcome and this is acknowledged. Nevertheless there have been many reported and published similar naturalistic follow-up studies 6.

From the perspective of some, in terms of evidence-based medicine, the treatment approach might be criticised for its failure to attempt brief-interventions. These have been the subject of much misinterpretation and misunderstanding. This follow-up group was all alcohol dependent and the majority severely so as determined by MAST scores and a clinical grading of the number of DSMIV criteria present. As Heather (1995) 7 has pointed out - brief interventions are not intended for those problem drinkers with severe established dependence, for whom a treatment goal of total abstinence is regarded as essential.

At Castle Craig the treatment approach used (the type of treatment is a mediator) is usually referred to as the Minnesota Model. This has been well described by Cook 8. This abstinence-based 12-step paradigm is based on the disease concept of alcoholism and uses the wisdom inherent in the 12-step of Alcoholics Anonymous (AA) 9. However, our programme additionally includes cognitive, behavioural and motivational techniques as well as formal family therapy, problem solving skills training, assertiveness training and formal instruction in relapse prevention. The 12-step facilitation approach has recently come under rigorous scrutiny in the form of Project MATCH in which 1,726 patients were randomly assigned to 12-step facilitation (TSF), structured sessions of cognitivebehavioural treatment (CBT) or motivational-enhancement therapy (MET) in two types of setting; (1) aftercare arm (this group had all been hospitalised immediately before) or (2) the out-patient group. Almost 90% were followed up for 3 years. Some 21 empirically derived predictions had been made during the design and none were sustained by the rigorous analysis of results. In terms of treatment approach, the results were marginally better for TSF patients at one year especially with the more severely alcohol dependent group and at the 3 year point clients from the TSF group with a social network supportive of drinking had better outcomes in terms of more abstinent days than those from the other two groups. Thus the position and validity of TSF has been established beyond doubt especially in the UK and particularly at the 3 year point where TSF treated patients (despite having higher levels of severity and poorer social network supports) fared much better. This legitimises Minnesota Model treatment. For a more comprehensive review of this subject I refer readers to the various commentaries 10 in Addiction. There is no reason to be pessimistic about treating patients with the alcohol dependence syndrome using TSF as project MATCH provides the scientific validity.

Two more useful conclusions can be drawn from Project Match which I believe are worthy of mention. Patient follow-up included data from collateral sources and blood tests (GGT and Carbohydrate-Deficient Transferrin). These concurred with patients' self-reports as indeed have other studies 11 - especially where abstinence is being reported. This has important implications for less well-funded studies where the cost of such tests can be prohibitive. Also the importance of seeking

collateral information from a 'locator' (e.g. husband/wife/life partner) is less important and in practical terms significantly reduces costs". Secondly the importance of in-depth assessment was commented on frequently as was the validity of abstinence as being the goal of choice for alcoholism. Two quotes from commentaries in Addiction are worthy of note; "In terms of sustained abstinence, TSF produced better results in the out-patients (10% more patients achieving year long continuous abstinence) than CBT or MET 12 "Most of these significant effects suggest some advantage for TSF therapy typically for clients who are more severely alcohol dependent." 13

The vast majority (96%) of patients treated at Castle Craig Clinic will initially require a detoxification. Management of withdrawal is often crucial to patient's safety and comfort and can foster patient engagement in an ongoing treatment and recovery process. Since unassisted withdrawal can cause seizure, psychosis, depression and suicidal ideation it may not only be dangerous but usually leads to further drinking. Patients at Castle Craig are carefully assessed medically and psychologically and an individual treatment plan is constructed based on particular needs during the course of their medically supervised detoxification. Residential care also provides a respite for patients (and their families) and removes them from environments which may be perpetuating their alcohol abuse. It also provides a setting when more intensive treatment can be provided. Effective links with aftercare can be established and finally residential care suggests to patients that their problems are indeed severe.

## THE FOLLOW-UP

As has been noted this follow-up can only be described as naturalistic as there was no control group. This figure of 96 was selected as it reflected the extent of our computerised database. Each patient was sent a postal questionnaire which inquires about relapse, abstinence, current use of alcohol and other drugs and asks patients to rate improvements (or deterioration) in terms of general quality of life, physical and mental health. This utilised a simple numerical rating scale (1-5) where 1 = worse and 5 = significantly improved. Where possible collateral information was obtained from a significant other. That said, information from Project MATCH and several other studies consistently show an high concordance between information from spouses, blood and urine tests and patients self reports. Of the 96 patients sent questionnaires 75 were eventually returned representing a return rate of 78% which is very acceptable in terms of this type of study 14. While the details of the outcome are shown in figures 2-5 it is worth noting now that 41% achieved continuous abstinence over a mean period of 20.8 months, with a further 19% reporting a "good" outcome (this is defined below). This is 60% of those replying and similar numbers also reported better outcomes in "quality of life", "mental health" and "physical health".

The mean follow-up period was 20.8 months (range 6-35) and in the continuously abstinent subgroup the mean time of follow-up was 16.6 months. The patients spent an average of 36 days in treatment with almost all (93%) completing their treatment programmes. Of the 96, 20 were known to have serious medical complications (cirrhosis), 72% had been hospitalised for alcohol-related problems in the 2 years before admission and 70% had had previous forms of treatment and/or counselling. 35% had a recent prosecution for drink/driving. Figure 1 shows the distribution in terms of severity of dependency and as can be seen most (82%) fall into the severely dependent category as judged by the number of DSM-IV diagnostic criteria present. So, despite the fact this group was still employed, they nevertheless represent a severely affected group of dependent drinkers.

The outcome categories were defined as follows:

Continuous Abstinence: Having consumed no alcohol whatsoever since discharge.

Good: No more than 3 relapses and continuously abstinent for 6 months before point of follow-up.

Poor: This included those whose drinking was worse/unchanged as well as a group who claimed to be controlling their intake.

Not Known: This is self-explanatory. There have been studies 15, 16 which have suggested that this group who don't reply to follow-up surveys tend to have poorer outcomes but that we should not be unduly pessimistic i.e. assume all have done poorly as this is not the case.



**Dependence - Severity** 

#### **Outcome - Mental Health**



CONCLUSION: To achieve a 60% good outcome group some 20.8 months after a treatment intervention is certainly better than many other comparable naturalistic studies. Marshall et al 17 in a long-term follow-up study of men with alcohol dependence noted an observed/expected mortality ratio of 3.64 - data which should give cause for concern. Valliant 18 in a long-term study refers to the fact that severe dependence usually leads to abstinence or death. To quote Edwards 19 "Thus, by any reckoning, substance dependence is a worrying, life-threatening condition. We and our patients are playing for high stakes and it must surely behove us to meet our responsibilities by getting the best possible treatment in place for each patient and as early as possible".

These patient have also reported significant improvements in physical and mental health and quality of life and analysis shows these groups whose drinking outcomes were improved. In summary 12-step treatment is an effective and legitimate therapy and these results show that a group of employed but nevertheless severely dependent patients most of who had already had other forms of treatment do produce good outcomes when followed-up after treatment.

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