

Very Low Cost Intensive Therapeutic Support and Long Term Monitoring for Patients with Alcohol Dependence Using New Technology.

K. Fletcher¹

¹Addictions Faculty, Royal College of Psychiatrists, Shrewsbury, United Kingdom

Introduction:

A very low cost treatment system for alcohol dependence is possible with new technology.

Objectives:

To maintain abstinence from alcohol with affordable remote intensive therapeutic support and long term follow up.

Aims:

To describe the use of new technology and its application in a treatment system to promote abstinence from alcohol.

Methods:

A new breathalyser uses a photo-ionisation device and a fuel cell to remotely monitor disulfiram metabolites and alcohol on a sample of breath. A small sample (n=10) of post-detoxified patients with severe alcohol dependence were provided with a breathalyser. Patients sent daily readings from various locations (e.g. UK, Australia, Germany). The clinical team required 2-3 minutes to read the results and email the patient each day. Patients were telephoned if readings dropped (missed tablet), or no sample was sent.

Results:

The mean duration of follow up was 11.3 months. Of 10 patients using the breathalyser 90% remained totally abstinent from alcohol. One patient had two brief lapses during an 8 month period, both of which were detected in advance.

There was no requirement for routine clinic follow up appointments. Daily emails and monthly summaries of progress were reported to be of great motivational value.

Conclusions:

New technology has the potential to provide daily remote therapeutic support and monitoring to alcohol dependent patients prescribed disulfiram. Early observations indicate that it is possible to maintain disulfiram adherence at very low cost. The sample size was small, and further trials are required, but early indications are promising.