

## An Evidence-based Analysis of the 'BRENDA Approach': Psychosocial Interventions for Dependent Alcohol Drinkers

Andrew M. Rome\*

McMillan Rome Limited, 33 Strathmartine Road, Dundee, DD3 7RW, Scotland

\*Corresponding author: Andrew, M. Rome, McMillan Rome Limited, 33 Strathmartine Road, Dundee, DD3 7RW, Scotland, Tel: 00 44 1382 690103; E-mail: [andrew@mcmillanrome.co.uk](mailto:andrew@mcmillanrome.co.uk)

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### Abstract

Alcohol dependence is one of the major causes of morbidity and mortality in the world, although less than 0.1% of the population would be diagnosed as severely alcohol dependent requiring the support of specialist services. Most patients with alcohol use disorders are classed as 'mild to moderate alcohol dependence' and can be successfully managed in non-specialist settings using a combination of pharmacological and psychosocial interventions.

'Psychosocial interventions' is an umbrella term used to capture a diverse range of different treatment and support options, making any meaningful comparisons challenging. It also suggests a level of specialist knowledge or skills required to deliver in practice. These can be off-putting to practitioners working in primary or community care settings.

The BRENDA model is a biopsychosocial approach which combines the medical management of alcohol dependency with a sequence of short structured discussions between the patient and practitioner. Its component parts are similar to many other frameworks such as FRAMES and FLAGS.

This review examines the essence of a psychosocial approach and highlights three key elements, Motivation, Self-efficacy and Support which are common to the most effective interventions. It concludes that the ability to explore these elements in an empathetic, reflective conversation with their patient will assist general practitioners and other community-based health and social care workers in delivering an effective and appropriate level of support to people with alcohol use disorders.

### Keywords:

Alcohol dependence; Literature review; Motivation; Addictive behavior; Psychosocial factors

### Introduction

In 2014 the World Health Organization (WHO) stated that the harmful use of alcohol is a component cause of more than 200 diseases and injury conditions. It identified the effects of short-term exposure including injuries from accidents and violence, acute vascular effects (cardiac arrhythmias, ischaemic stroke), depression and death, including suicide. Long-term exposure is associated with chronic conditions such as liver cirrhosis and cancer [1].

WHO estimate that 4.0% of the world's adult population is alcohol dependent and that, in 2012, 5.1% of the global burden of disease and injury was due to alcohol misuse [1]. In England 5.9% of the adult population experience alcohol dependence; most are classified as either mild (5.4%) or moderate (0.4%) dependence [2]. These conditions can now be effectively managed by non-specialist practitioners in the community using a combination of pharmacology and psychosocial support.

This paper provides a review of the effective interventions employed under the 'umbrella' term of psychosocial support. In particular, it examines the component interventions which are collectively described as the 'BRENDA approach' [3], and suggests

how these can be delivered to dependent drinkers by a range of health and social care practitioners.

It will be of particular interest to General Practitioners and other health professionals working within a primary care setting as well as to practitioners in secondary care health settings and community care.

### Biopsychosocial approach

The review of the effectiveness of treatment for alcohol problems carried out by the National Treatment Agency in England (2006) suggest that 'Drinking takes place within a social context, which has a powerful influence on the amounts and patterns of drinking' [4]. This supports the assertion of William Miller (2001) that, 'Most professionals reject a simplistic notion that all you have to do is prescribe' [3]. This was the basis upon which Volpicelli and colleagues suggested a combination approach of medication and psychosocial support for the treatment of addictions. Heather et al, in their review of the cost-effectiveness of different alcohol treatments concluded that psychosocial interventions 'can be widely delivered at a reasonable cost, [and] will have wider social cost savings and achieve reductions in drinking and alcohol problems [4].

This preventative healthcare approach was further endorsed by a report on a cost-effectiveness review conducted in the USA which concluded that, 'A 10 minute screening and talk with a doctor about problem drinking delivers almost as much bang for the buck to the health system as childhood immunisation and advice about taking aspirin to prevent stroke and heart attack... but just 8.7% of problem drinkers report receiving such information' [5,6].

### What is psychosocial support?

Psychosocial support covers a spectrum of interventions. The Health Technology Assessment of Prevention of Relapse in Alcohol Dependence describes psychosocial interventions as being, 'Based around 'talking therapies', which can involve one-to-one, couple, family or group approaches and encourage self-help as part of the treatment and support options. These interventions are numerous, having more than 40 different 'brand names', although certain ingredients are common to almost all (e.g. the therapeutic alliance)' [7].

A systematic review of integrated psychosocial and opioid-antagonist treatment for alcohol dependence identified 14 studies conducted between 1992 and 2001 [8]. Although these studies were similar in terms of their research question, their definitions of psychosocial interventions varied considerably; including coping skills training, supportive therapy, relapse prevention and abstinence training, standard alcoholism group therapy, cue-exposure training and a combined medication management and clinical care approach. Three of the studies used several of these psychosocial treatments.

In a review of alcohol brief interventions (ABI), Proudfoot identified differences in how ABIs were defined, ranging from 'very brief' (up to 20 minutes) to 'extended' (several visits). It could be argued that the latter falls more under the definition of psychosocial interventions rather than brief interventions [9].

The NICE guidelines on alcohol use disorders states that harmful drinkers or people with mild alcohol dependence should be offered psychological interventions focused specifically on alcohol-related cognitions, behaviour problems and social networks [10].

In a meta-analysis of studies comparing different psychotherapies Imel (2008) found no difference in effect in terms of alcohol consumption between the different interventions used [11]. Similarly the UK Alcohol Treatment Trial (UKATT) Research Team conducted a randomized, controlled trial between motivation enhancement therapy (MET) and social behaviour and network therapy (SBNT). The authors concluded that no differences in outcomes were found between the two intervention types [12]. The SIPS trial in England also found no significant differences in outcomes between 3 different interventions: simple feedback plus leaflet, additional brief advice and extended intervention [13].

In a critique of treatment research on psychological treatments for addictions, Orford (2008) concluded that 'the field should stop studying named techniques and focus instead on change processes' [14].

In 2001, Miller conducted a methodological analysis of clinical trials of treatments for alcohol use disorders. This wide ranging meta-analysis provides a ranking system of cost-effectiveness and clinical-effectiveness of different pharmacological and non-pharmacological interventions [15]. It identified self-efficacy, motivation to change and

support systems as being common denominators of effective psychosocial interventions.

### What is BRENDA?

The BRENDA approach has been used in a number of research studies which have sought to explore the efficacy of certain medications, opioid antagonists. The benefit of using BRENDA appears to be the ability to utilise a pre-defined package of psychosocial interventions as a control variable [11].

In a Cochrane Review of opioid antagonists in the treatment of alcohol dependence, fifty double-blinded, randomised controlled trials were identified, 6 of which specifically mentioned BRENDA [16].

In clinical practice the component parts of the BRENDA approach currently feature in a range of guidance and good practice documents regarding the treatment of alcohol dependence in general practice used in the UK [17], North America [18,19] and Australia [20].

In his foreword to *Combining Medication and Psychosocial Treatment for Addictions: The Brenda Approach*, Miller emphasizes that BRENDA is not in itself a comprehensive treatment approach, but rather a framework for management of addictions and a good beginning for recovery [3]. Volpicelli constructed what he described as 'A simple 6-stage framework for integrating the use of medications in the treatment of people with alcohol and drug addiction' [3].

These 6 stages are:

B - Biopsychosocial evaluation

R - Report to the patient on assessment

E - Empathic understanding of the patient's problem

N - Needs expressed by the patient that should be addressed

D - Direct advice on how to meet these needs

A - Assessing responses/behaviours of the patient to advice and adjusting treatment recommendations

The use of frameworks for psychosocial interventions in the treatment of alcohol problems is not uncommon. There is a large degree of crossover between the components of BRENDA and those of FRAMES (Feedback, Responsibility, Advice, Menu, Empathy, Self-efficacy) [21] and FLAGS (Feedback, Listen, Advise, Goals, Strategies) [22]. Similar frameworks have also been used in smoking cessation services [23].

Volpicelli provided a simplified description of how he developed the concept of BRENDA.

'My colleagues and I found that by listening to patients we could gather data on how alcohol and drug use led to biopsychosocial complications across various aspects of the patients' lives. In a non-confrontational manner, we simply reported back the results of the evaluation and related how alcohol drinking or drug use was complicating their lives' [3].

### Who would benefit from this approach?

Psychosocial interventions are used across a range of alcohol-related presentations; from brief interventions for hazardous drinkers to structured therapeutic packages of care for dependent drinkers. The UKATT study [12], and Project MATCH [24] in the United States found no evidence that matching particular clients to different types of

psychosocial interventions resulted in any substantial improvements in the effectiveness for treatment of alcohol problems.

This provides further evidence that the important elements of psychosocial interventions are not the frameworks constructed or the acronym used to describe it or them, but a common set of interventions aimed at helping patients identify problems associated with their alcohol dependence, gauging their readiness to change and their perceptions of their own abilities and providing a supportive, non-judgmental relationship through the change process.

### **Can it be delivered in primary care?**

In a comparative review of different alcohol treatment approaches Hester & Miller (2003) [25] identified BRENDA as being a non-specialist approach for the treatment of alcohol dependence. In his introduction to the BRENDA approach Volpicelli stated that 'GPs, nurse practitioners, psychologists, counsellors and social workers each have key roles to play in identifying and managing treatment for alcohol and drug addiction' [3]. Over the last 10 years it has become increasingly common for patients with alcohol dependence to be identified, assessed and treated within a general practice setting [19,21,26]. A survey of GPs in England in 2010 found that GPs are more prepared to counsel for alcohol problems than 10 years ago (94% v 81%) [27]. A review of the SIGN 74 guidance in Scotland found that psychosocial interventions were being used by GPs and partner agencies in the management of alcohol dependence. These included motivational interviewing, motivational enhancement therapy and cognitive behavioural therapy [28].

Volpicelli states that in order to deliver the component parts of BRENDA, practitioners must be able to understand the difference between recreational or social use of alcohol and alcohol dependency [3].

### **Deconstructing BRENDA**

The 6-stage approach put forward by Volpicelli serves as a useful algorithm for practitioners in non-specialist settings rather than a stand-alone treatment intervention. As discussed earlier, these stages are common to other behaviour change processes. This final section provides an exploration of each stage and how they can be delivered in practice.

Unlike the delivery of alcohol screening and brief intervention, which is conventionally delivered within a 10-15 minute consultation, psychosocial interventions for patients with alcohol dependence can take place over a period of weeks or months [29].

The component parts of BRENDA described here should therefore be regarded as a 'toolbox' of interventions to be used at appropriate junctures in response to the patients' level of understanding and engagement, rather than a precise chronological process.

### **B - Biopsychosocial evaluation**

The initial assessment of the impact of the patient's alcohol dependency should consider not only the negative consequences of heavy drinking on physical health, but also the psychological harm, in terms of disorders of thought, mood and cognitive function. The social harm often manifests in relationship and employment/economic difficulties, accommodation problems and reduction in social functioning. These areas should all be explored as part of a biopsychosocial evaluation, in terms of their severity and duration.

It is unlikely that all can be fully assessed during one consultation, or by one individual. Volpicelli states that,

'It is not expected that every primary care provider, mental health professional, or addiction counsellor will feel comfortable with all aspects of the initial comprehensive biopsychosocial evaluation or be able to conduct all aspects of treatment...Ideally, addiction treatment involves a close collaboration between all types of health care professionals' [3].

The review of the implementation of the SIGN 74 guidance on the management of alcohol dependence in primary care [29] highlighted that, although aware of the services provided by specialist NHS alcohol treatment services, many GPs in Scotland were unaware of what contribution could be provided by local non-statutory alcohol support services [30].

### **R - Report to the patient on assessment**

Similar to Feedback (F) on the FRAMES model, a key component of any psychosocial approach is the way in which the results of the Biopsychosocial evaluation and the practitioner's interpretation of this are conveyed to the patient and how the patient reacts to this.

In relation to the factors associated with effective psychosocial interventions [15], this conversation allows the practitioner to gauge the patient's motivation to change, belief in their own ability to bring about change and, as a result, their readiness to change.

In order to ensure that the practitioner is able to tailor their response to the patient, it is necessary to establish, through discussion and observation of non-verbal communication, what stage of change [31] the patient is at; precontemplation, contemplation, decision-making, action or maintenance.

Although there are a number of validated instruments that can assist in determining stage of change [32,33] and readiness to change [34,35] these are not widely used in the UK. However there are a number of useful ABI and smoking cessation resources which can be used to help assess the patient's readiness to change [18,36].

### **E - Empathic understanding of the patient's problem**

The importance of empathy is often understated as a factor in treatment engagement and efficacy. BRENDA suggests that an empathic understanding is demonstrated by; listening to understand the patient's emotional reaction, expressing understanding of the patient's emotional reaction given his or her assumptions and challenging negative assumptions underlying the patient's distress [3].

SMART Recovery® views empathy as one of the most important elements of motivational interviewing, stating that, 'When people feel understood they are more likely to be open and share their experiences' [37]. This supports the view of Miller that empathy is not a stage in a process but 'A way of being with a client' [38].

In an exploration of the importance of the relationship between practitioner and patient in a combined opioid antagonist and psychosocial intervention treatment, Ernst concluded that, 'The patient's perception of a good clinician-patient relationship during treatment predicted better drinking outcomes. Patients satisfied with Medical Management treatment upon completion reported more abstinence and were more likely to have clinical improvement' [39].

In a study of the perceptions of problem drinkers in NHS and private treatment in England [40], patients defined quality by their personal relationships with the healthcare team, the care they received, the attitude of the staff towards their problem drinking and the way they felt personally supported.

While it can be argued that conducting a biopsychosocial evaluation and reporting back are defined stages in a psychosocial treatment package, the expression of empathy is an underlying principle of good practice and clinical effectiveness in the way the process should be conducted.

#### **N - Needs expressed by the patient that should be addressed**

Dependent drinkers who are contemplating change are often in an ambivalent state, while at the same time recognising that there are negative consequences from continued heavy drinking.

There are useful techniques to help the patient unravel this dissonance and be able to distinguish 'wants' from 'needs' and to be able to balance the benefits of continued drinking (pros) and the detrimental effect (cons). It is this clarity of purpose and goal that will assist in enhancing the patient's motivation to change.

In establishing the priority of goals it is useful to reflect on Maslow's hierarchy of needs [41] which suggests that the basic or primitive needs such as food and shelter should be addressed first before those of relationships and employment.

This identification and prioritising of needs should be a collaborative process between clinician and patient.

#### **D - Direct advice on how to meet these needs**

BRENDA suggests that the giving of direct advice is about matching patient need to available resources, presenting a menu of treatment options and pointing out how these options help achieve the patient's priorities [3].

The idea of presenting patients with alcohol problems with a menu of options and giving advice is widely used across different models and frameworks, such as FRAMES [21] and FLAGS [22]. The practitioner should caution against adopting an 'expert' role in giving advice as this is often associated with conflict, disengagement and negative outcomes. Successful engagement is more often associated with equal relationships where the practitioner assists the patient in exploring the options that work best for them at that time and that are congruent with their needs and goals.

#### **A - Assessing responses/behaviors of the patient to advice and adjusting treatment recommendations**

Evaluation is part of the normal sequence of healthcare provision following on from assessment, planning and the implementation of an intervention. In the context of alcohol dependence this review process may take place periodically over a number of weeks or months and consist of 4 key tasks;

- A re-assessment of the problems identified through the initial biopsychosocial evaluation and affirmative reinforcement of any positive change (however small these may appear to be).
- Review the patient's goals for recovery and their stage of change in relation to these goals.

- Assess whether the patient is following up on treatment recommendations.
- Discuss the nature and extent of the patient's engagement with treatment in relation to their needs and goals and redefine treatment and/or goals as necessary.

It is important to stress to the patient that the locus of control and responsibility for the achievement of goals lies with them. The practitioner's role is to assist them in achieving these agreed goals. Emphasizing the nature of the relationship supports the principle of self-management and minimises the risk of resistance.

#### **Conclusions**

Patients presenting with alcohol dependence in primary care may be suitable for management using a combination of drug treatment and psychosocial interventions. This paper identifies the key components of psychosocial interventions and suggests that these can be delivered by primary care practitioners with support from local community-based non-statutory alcohol services. The framework for providing these interventions will be familiar to primary care practitioners. This paper provides a particular focus on the congruence of the role and skill set of the General Practitioner and draws parallels with other behavioral approaches used in primary care for the management of long-term conditions. It identifies common stages of assessment, planning, delivery of intervention and evaluation which will be familiar to those working in general practice. Following initial biopsychosocial evaluation, these stages will be revisited as necessary over a period of weeks or months, depending on clinical presentation, but should be managed within 7-15 minute sessions and can therefore be accommodated within the time constraints of general practice appointments.

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