

# The Use of Motivational Interviewing in Anorexia Nervosa

Khanya Price-Evans<sup>1</sup> & Janet Treasure<sup>2</sup>

<sup>1</sup>*Division of Psychological Medicine, Kings College London, 5th Floor, Thomas Guy House, Guy's Hospital, London SE1 9RT, UK. E-mail: khanyapriceevans@gmail.com*

<sup>2</sup>*Department of Psychology, Institute of Psychiatry, De Crespigny Park, London SE5 8AF, UK*

Anorexia nervosa (AN) is often highly valued by the individual. This can result in the individual having ambiguous and ambivalent feelings towards change. This ambiguity and ambivalence poses a major hurdle within the treatment process. The use of motivational interviewing (MI) during the initial phase of treatment to subtly guide the individual towards committing to change is increasing. Working within the particular constraints that govern the treatment of AN, such as impaired cognitive function, age of the patient, and the natural (biological) and social (Mental Health Act) laws that govern the need to eat, it is possible to adjust particular assumptions of the MI model (e.g. patients autonomy) to enable treatment and care to be provided in the MI spirit (e.g. supportive, affirming and empathic).

**Keywords:** Anorexia nervosa; motivational interviewing; children and adolescents

## Introduction

Eating Disorders (EDs), which include Anorexia Nervosa (AN), Bulimia Nervosa (BN), Binge Eating Disorder (BED) and Eating Disorders Not Otherwise Specified (EDNOS), predominantly affect young people, with there being the highest incidence in females 10–19 years of age (Currin et al., 2005; Treasure, Claudino, & Zucker, 2010). EDs are complex mental diseases with intricately complicated pathogenesis including factors such as individual genetic vulnerability, and both shared and individual environmental factors (Fassino et al., 2009; Treasure et al., 2010).

### *Treatment for AN*

The only treatment for AN partially endorsed by the National Institute for Clinical Excellence (NICE) (a Grade B recommendation) was family therapy for adolescents with a short duration of AN (National Collaborating Centre for Mental Health, 2004). A 2010 Cochrane review included further trials and reached a similar conclusion, albeit with the caveat that many studies in AN have methodological limitations, especially problems of power (Fisher, Hetrick, & Rushford, 2010).

High rates of drop-out and low treatment adherence are problems associated with individual treatment (Halmi et al., 2005). Thus it is possible that the effectiveness of family therapy in individuals living at home is because the family facilitates engagement in treatment.

### *Engagement in treatment: readiness to change*

AN is characterised by ambivalence about and variability in motivation to recover (Blake, Turnbull, & Treasure, 1997; Vitousek, Watson, & Wilson, 1998). In

some conceptualisations of AN it has been proposed that AN may serve a functional, positive, valued purpose (Schmidt & Treasure, 2006). For example, AN may provide the sufferer with a sense of self-worth (Bachner-Melman, Zohar, & Ebstein, 2006) as well as the sufferer finding pleasure in their AN. As one recovered sufferer stated: 'I was in love with my anorexia' (Serpell et al., 2004, 1999). Thus the AN sufferer may initially only undertake treatment in response to external demands (occupational, medical or familial). This reluctance/ambivalence to recover poses a major challenge for the treatment process.

### *Explanatory models of health behaviour change*

Several models have been developed to conceptualise motivation/readiness to change. Within the transtheoretical model (TTM) (Prochaska, DiClemente, & Norcross, 1992) is the premise that people move through a sequence of stages; from precontemplation to contemplation to preparation/action and finally maintenance. The precontemplation stage refers to a stage when the sufferer has no desire whatsoever to change. The contemplation stage is characterised by huge uncertainty and ambivalence about change; in combination, both these stages represent a low motivational state to change (McHugh, 2007).

Fewer than 50% of patients with AN who present for treatment are ready for active change (Blake et al., 1996). The disparity between the AN sufferer's ambivalence to change and the medical urgency with which change may be required poses many challenges (Treasure & Schmidt, 2008). MI is a style of intervention that is effective in those who are hostile to the idea of change, and it is a means to by-pass the resistance that arises if there is a mis-match between

the readiness to change on the part of the patient and carers.

## Motivational Interviewing

MI is a person-centred, collaborative therapeutic intervention (Miller & Rollnick, 1991, 2002; Rollnick, Miller, & Butler, 2008) that was developed in the field of addictions and has grown into a widely applied behavioural intervention (Miller & Rollnick, 1991). The essence of MI is underpinned by a Rogerian base (Rogers, 1959), emphasising autonomy, empathy, and respect for the patient's own beliefs and thoughts about change. There is also a directive element guided by differentially eliciting and reinforcing 'change talk'.<sup>1</sup> The MI model views resistance as a consequence of ambivalence towards change. The initial goal of MI is to facilitate an increase in the client's intrinsic motivation, commitment (Phase 1) and then preparation for change (Phase 2) (Arkowitz et al., 2008). Primarily, the therapeutic relationship is a 'partnership' where the patient's autonomy is respected (Miller & Rollnick, 1991). The facilitation of change is based on subtle, gentle and responsive guiding, a process almost undetectable to an observer (Rollnick & Miller, 2002). Initially the therapist helps the patient develop discrepancy between their present situation and their desired goal. The subtle methods used to initiate the discrepancy are a far cry from the overtly directive and confrontational methods once employed. The evocation of self-motivating speech (change talk) allows the patient to develop their own advantages and disadvantages of change.

There are four basic technical devices subsumed under the acronym OARS, Open questions, Affirmations, Reflections and Summaries.

*Open questions.* Closed questions, which elicit monosyllabic answers, should be avoided in favour of open questions, which open the opportunity for the patient to speak. Overall questions should be limited (never more than three in a row). Reflections should be used in preference to questions.

*Affirmations.* The therapist has a compassionate accepting stance and reflects upon strengths, and positive moves towards more helpful behaviours.

*Reflections.* The therapist uses reflections as an implicit mark of listening, which may encourage the patient to pause for thought as they are able to hear what they themselves are thinking. This in turn may lead to further elaboration. Reflections convey empathy. Complex reflections move the conversation forward and direct it towards change by drawing upon emotional energy, enhancing self-efficacy, or emphasizing effective change strategies. Several forms of reflections are used to side step resistance: for example, a double sided reflection contrasts and joins reasons for and against change.

*Summaries.* Short précis that encapsulate the gist of the argument, particularly of the pro change ideas, intentions or behaviours, can be used at intervals to enable the patient to hear what he/she is thinking and saying.

## The use of motivational interviewing to facilitate behaviour change in ED

### *The assumption of autonomy*

MI was developed for use in the addictions where there can be acceptance of the patients' autonomy over their decision to change. However, in the case of AN, many patients lack the capacity to make autonomous decisions due to their age (many sufferers are adolescent or pre-adolescent) or their debilitation through starvation; both cognitive and emotional functioning are impaired (for review see Treasure et al., 2010). In many countries this is acknowledged within the law; in the UK, for example, the Mental Health Act (2007) is used to treat patients who suffer from life threatening AN involuntarily (Treasure & Schmidt, 2008). At the most basic biological level, all living beings need to eat; therefore there are strict limitations to individual freedom and total autonomy over the choice to eat or not for both the patient and the therapist. Nevertheless, although something may be a non-negotiable matter, it is possible to manage this without resorting to confrontation or threat but in an empathic 'one-down position', in which the patient and the therapist are both bound by the laws of a higher authority (the laws of nature or mental health legislation) (Treasure & Schmidt, 2008). Adaptations such as this still allow treatment to be conducted in the 'MI spirit' – that is, using a collaborative, empathic and respectful stance throughout.

### *What needs to change?*

A key and very visible problem with AN sufferers is the problem with eating. However, as many cases of AN arise early in development, AN is often associated with additional difficulties such as maladaptive emotional regulation strategies (Harrison et al., 2009), particular thinking styles such as a tendency to focus on detail rather than the general picture (Lopez et al., 2008), reduced flexibility (Roberts et al., 2010) and persistent anxiety related problems (Kaye et al., 2004). These cognitive and emotional factors may predate the onset of the illness but are exaggerated by the illness. The secondary consequences within the family may also need to be targeted. These domains are described within the cognitive interpersonal model that can be used as a basis to formulate the case and plan of treatment (Schmidt & Treasure, 2006).

### *Motivational enhancement therapy and other combinations of MI with methods of behaviour change*

The style of MI can be used in conjunction with other behaviour change methods. For example, motivational enhancement therapy is a common adaptation in which personal feedback and normative values are given. Once an individual is committed to change, then the active approaches associated with cognitive behaviour therapy blend well together. Several systematic reviews have collated the evidence about the efficacy of MI (Burke, Arkowitz, & Dunn, 2002). MI is also effective with young adolescent populations in health related areas (Naar-King et al., 2010; Whiteside et al., 2010).

<sup>1</sup>'Change talk' is the term used when individuals themselves present arguments and commitment to change.

### Motivation enhancement in the early phase of treatment for AN

In the initial engagement phase with patients with AN it can be useful to provide feedback about the medical and nutritional consequences of their AN. Other forms of personalised feedback relating to cognitive style (Lopez et al., 2008) or socio emotional functioning are also helpful (Treasure & Ward, 1997; Treasure, Smith, & Crane, 2007).

The following excerpt from a role play written by eating disorder therapists illustrates the use of MI when planning possible goals for behaviour change. In the first session the patient is given a workbook (see Table 1) with key information about eating disorders, and this is then reviewed in the second session.

### Therapist—patient dialogue

In the following therapeutic dialogue we illustrate the MI adherent processes that are occurring.

**Therapist:** So thinking about all the different eating behaviours you have, do you think we could just look at this and start to think how you could fill it in? First, eating too few calories ... would you say that is something that is an issue for you? (OPEN QUESTION)

**Table 1.** Problematic eating and drinking behaviours

Problematic eating and drinking behaviours.			
Name ..... Date.....			
Description of impact: how does this behaviour impact on physical, psychological, social, work aspects of life?			
Importance: How important is it for you that you change this behaviour? (You might want to give a score for your family or friends too)			
Ability: how confident do you feel that you can change this behaviour?			
Behaviour	Description of impact	Importance 1–10 (10 high)	Ability 1–10 (10 high)
Too few calories (<2000)			
Uncontrolled, over eating (binges)			
Food rituals & rules:			
purchase			
preparation			
consumption			
Limited content:			
Vegan			
Protein			
Vitamins /minerals			
Carbohydrate (slow)			
Excess junk food			
Day time fasting> 3 hours			
Spitting			
Vomiting			
Drinking rituals			
> 1 litre			
< 0.5 litre			
Caffeinated drinks			
Alcohol			
Social eating			

**Patient:** Yes, I am afraid I am not eating enough.. um well I have not eaten enough every day which is the same old story but.. uh.

**Therapist:** Uh Uh sounds like you have quite strict rules about eating. (COMPLEX REFLECTION)

**Patient:** Yes, I like it to be that way. I don't want to eat more than um well... I usually try to stick to 400 calories per day so er yes that's my rule I think.

**Therapist:** So during the day you are counting calories and its unpleasant and guilt provoking if you go over 400 calories per day. (COMPLEX REFLECTION)

**Patient:** Yes, I am starting to feel very fidgety talking about it now and even thinking about it and I do count all the calories that I eat and I do know all the calories in everything that I eat.

**Therapist:** And if it happens that you go over can you tell me more about that? (OPEN QUESTION)

**Patient:** Well the next day I would just not eat anything to try and compensate for it more and I would also try to do more exercise. So I would try to work out how many calories that I could burn in an hour and then try to compensate for that.

**Therapist:** So it looks as if you're skilled at being able to think about the detail and analyse things related to eating and energy consumption and you probably know a great deal about that. (COMPLEX REFLECTION)

**Patient:** Yes. Yes I do.

**Therapist:** Now you have probably read some of the other parts of this information booklet where we discuss how the brain itself needs 500 calories (this is an example of sharing information in an MI adherent way). What do you think of that fact given that you only allow 400 calories for your own body? (OPEN QUESTION)

**Patient:** Um well it means that um I need to eat just 100 calories more for my brain and the rest of my body needs more calories um yes I guess it does. So it's not enough calories is it even for the brain, but I am managing okay so I think it's alright. (The last statement shows resistance).

**Therapist:** Part of you thinks you are managing okay but as you know your weight has been falling quite markedly but, then, another part takes on the challenge of coming here and starting to reflect on it. (DOUBLE SIDED REFLECTION) (A double sided reflection is used to side step resistance)

**Therapist:** the challenge of increasing calories to a normal level seems formidable. (COMPLEX REFLECTION)

**Patient:** Yes

**Therapist:** Is it okay if I discuss how the literature and other patients use strategies to overcome formidable challenges by taking small steps? If the step is too big you fail, which sets you back and if it's too small you and others may ignore it. It can be very difficult to get that first step just right. You were talking about increasing by 100 or 200 calories. (Providing information about behaviour change strategies with permission).

**Patient:** Yes.

**Therapist:** Okay, so how could you do that? What would you put into your diet to achieve that? (OPEN QUESTION)

**Patient:** Well at the moment I don't eat breakfast, I just leave the house and go to college. Then it starts to become lunchtime, maybe one o'clock and I feel really weak and I usually just have an apple um and some



crackers, so I guess I am not eating from when I go to bed right up until lunchtime the next day so maybe I could have like some bran flakes in the morning or some cereal bars.

*Therapist:* I think you are right; having such a prolonged fast would make it quite difficult for the brain to keep glucose levels normal without relying on stress hormones. (AFFIRMATION and elaboration by introducing the biological context). So the first question is the cereal bar, how would you go about introducing that? (OPEN QUESTION)

*Patient:* Well as my Mum does the shopping maybe I could ask her to get me the cereal bar, but I think I would like to go with her and then I can choose for myself as I really don't want her to get me a really horrible fatty one.

*Therapist:* So can you visualise asking her to help and would she being able to do that with you? (Once an individual has reached the planning stage, it is necessary to spend time developing a clear visualised strategy of what change would entail. Producing a story board with each step drawn in detail and anticipating obstacles and making plans about how to overcome them e.g. if -then strategies used in implementation intervention devised by Gollwitzer et al., 2009).

*Patient:* I think she would be quite happy to, I think she would be quite excited to help me in what I am going to do.

*Therapist:* So how will you find her getting pleased? Do you think that will tweak the anorexia a bit or do you think you will be able to see over that into the context of your whole life plan? (The therapist anticipates how the reaction of others may lead to a retreat into AN but helps the patient to keep focused on the bigger picture).

*Patient:* I think I can see over it because it is only one cereal bar, and if you are supposed to eat 2000 calories a day and I am only eating 400 calories. So I think just that one cereal bar I need that for my brain don't I and then at least my brain has got enough.

*Therapist:* It will be a start; it will be helping to maintain some energy rather than having to destroy more body tissues. (AFFIRMATION and elaboration by continuing the biological theme). So you can imagine going into a shop with your mother to buy these bars? (OPEN QUESTION)

*Patient:* Yes actually there are some kinds of bars I really like so I will have a look to see if they have got them.

*Therapist:* So, from what you've been saying, there are some kinds of cereal bars that you really like and you're going to go with your mum to choose the ones you want, which will mean you will be able to try and have a cereal bar for breakfast in the morning so you don't have such long gaps without food. (SUMMARY)

### *Consideration of using MI with families/carers*

People suffering with AN tend to be reliant on their families due to their age and/or the severity and chronically debilitating nature of the illness (Treasure et al., 2001, 2008). Within the UK the National Institute for Health and Clinical Excellence (NICE, 2004) has recommended that AN should be treated on an outpatient basis wherever possible. Thus a tremendous responsibility of care falls upon the family (Treasure et al., 2001, 2008). AN has a profound effect within the

family (Whitney et al., 2007) and carers report a lack of the necessary skills and resources required to provide care for the sufferer (Haigh & Treasure, 2003; Treasure et al., 2001). This can inadvertently play a role in the maintenance or aggravation of the problem (Treasure et al., 2008). A causal chain develops whereby high expressed emotion (hostility and overprotection) and accommodation behaviours (such as giving reassurance) serve to increase interpersonal tension and stress and serve to maintain eating disorder behaviours.

MI has been utilised with families and carers in a variety of ways. It has provided the necessary framework from which to model communication skills that assist with symptom management, in addition helping to change behaviours and attitudes that may inadvertently maintain the AN (Sepulveda, Lopez, Todd, Whitaker, & Treasure, 2008; Treasure, Lopez, & MacDonald, 2009).

### **Carer-sufferer dialogue**

The following role play demonstrates a carer-sufferer interaction: calm, compassionate, caring and guiding responses based on the MI premise of rolling with resistance (avoiding confrontation).

*Carer:* Okay let's take a bite, then we could maybe just get on with the eating and then later maybe you could go to the cinema.

*Sufferer:* I am not particularly hungry at the moment.

*Carer:* Yes, I guess that's the way it works, it is about a road to getting better (*sidestep resistance*). You know what they say even though you are not hungry try to get on with it; it is part of your plan to recovery and to get your life back. (Calm acceptance but shifting the emphasis to the bigger picture of life).

*Sufferer:* Yes but I did have a late breakfast this morning and maybe I could have this when I come back.

*Carer:* You know you could do that (*accept autonomy*). On the one hand you could go for no pain now but what would happen later? (OPEN QUESTION)

*Sufferer:* Yes but I really don't want it, or to eat it all.

*Carer:* Yes, I know. Let's try not to get into confrontations at the moment because that does not help; maybe if you could just try and give it a go and fight that other voice and stick to the plan. If you get upset I will do my best to help you, so try and fight that voice and let's see how we get on with it. I will help you. (Calm reminder of plans).

*Sufferer:* You know I really don't want this at all and I really don't want you to be upset with me if I can't eat it at all.

*Carer:* As I said I wouldn't get upset with you and as I said I don't want to get into any confrontations at the moment, I know how difficult it is for you, I really do understand - all I want to do is to help you and help you to be able to move forwards and to make progress with your life.

*Sufferer:* I really don't want to eat any more.

*Carer:* I know it is very brave of you because the anorexic voice does that to you to not want to eat it doesn't it? Okay, so maybe you could take a bite out of it and see how it goes - shall we give it a go? (The carer manages the conversation in order to not allow avoidance to dominate. A patient, persistent and calm approach is needed).

## The evidence base for the use of motivational interviewing for people with eating disorders

### Changing eating patterns

Although a comparatively small number of clinical trials have focused specifically on the implementation of MI for AN, MI techniques have been employed in areas such as a pre-therapy measure (Feld et al., 2006; Wade et al., 2009), as a form of providing personalised feedback (Schmidt & Treasure, 2006), as motivational enhancement therapy (MET) (Feld et al., 2006) and in the form of co-joined therapy with CBT (Gowers et al., 2007; Gowers, Smyth, & Shore, 2004).

### Changing risk traits

A MET module including neuropsychological feedback that targets the typical cognitive style of weak coherence, over emphasis on detail and rigidity has been described (Lopez et al., 2008).

### Training for carers

Although in its infancy, recent research (Sepulveda et al., 2008) suggests psycho-education in the form of training sessions may be a feasible method to better equip carers with the necessary skills and methods of MI to facilitate a reduction in the negative interpersonal factors and foster communication and readiness to change.

## Conclusion

People with AN have mixed feelings about change and AN may also be highly valued by the individual. There is interest in using MI in the first phase of treatment for AN to guide individuals to commit to change through invoking their intrinsic motivation to do so. However, the prevalence of a variety of confounding factors surrounding AN mean that some of the assumptions associated with MI, such as patient autonomy, may need to be adjusted. Nevertheless, both professional and family care can still be provided in the MI spirit (e.g. affirming, empathising, asking permission) (Treasure & Schmidt, 2008). The evidence base supporting this approach is gradually increasing.

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