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Motivational interviewing

Janet Treasure

Abstract Motivational interviewing is a style of patient-centred counselling developed to facilitate change in health-related behaviours. The core principle of the approach is negotiation rather than conflict. In this article I review the historical development of motivational interviewing and give some of the theoretical underpinnings of the approach. I summarise the available evidence on its usefulness and discuss practical details of its implementation, using vignettes to illustrate particular techniques.

Motivational interviewing was conceived when Bill Miller, a psychologist from the USA, sat with colleagues from Norway and described what sort of therapeutic approach worked for people with alcohol problems. The process of discovery may have been like the technique itself: a gradual process of listening, reflecting to check understanding, and clarification. Once the form was crystallised it was subjected to a detailed academic analysis. Questions concerning what, how, when, why and for whom have been studied. The approach has been fitted with various theoretical models relating to interpersonal processes and behaviour change. The resultant technique was described in a textbook co-written with Steve Rollnick, a South African psychologist working in Wales (Miller & Rollnick, 1991). International training has meant that the approach has been widely disseminated and evaluated in a variety of settings.

What is motivational interviewing?

Motivational interviewing is a directive, patient-centred counselling style that aims to help patients explore and resolve their ambivalence about behaviour change. It combines elements of style (warmth and empathy) with technique (e.g. focused reflective listening and the development of discrepancy). A core tenet of the technique is that the patient's motivation to change is enhanced if there is a gentle process of negotiation in which the patient, not the practitioner, articulates the benefits and costs involved. A strong principle of this approach is that conflict is unhelpful and that a collaborative relationship between therapist and patient, in which they tackle the problem together, is essential. The four central principles of motivational interviewing are shown in Box 1.

Box 1 The four central principles of motivational interviewing

1 Express empathy by using reflective listening to convey understanding of the patient's point of view and underlying drives
2 Develop the discrepancy between the patient's most deeply held values and their current behaviour (i.e. tease out ways in which current unhealthy behaviours conflict with the wish to 'be good' – or to be viewed to be good)
3 Sidestep resistance by responding with empathy and understanding rather than confrontation
4 Support self-efficacy by building the patient's confidence that change is possible

Rollnick & Miller (1995) defined specific behaviours, which could be taught to therapists, that they felt led to a better therapeutic alliance and better outcome. These are summarised in Box 2.

The first four items in Box 2 explore the reasons that sustain the behaviour and aim to help the patient shift the decisional balance of pros and cons into the direction of change. The last two items in the list cover the interpersonal aspects of the relationship. The therapist provides warmth and optimism and takes a subordinate, non-powerful position, which

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Box 2 The skills of a good motivational therapist

- Understand the other person's frame of reference
- Filter the patient's thoughts so that statements encouraging change are amplified and statements that reflect the status quo are dampened down
- Elicit from the patient statements that encourage change, such as expressions of problem recognition, concern, desire, intention to change and ability to change
- Match the processes used in the theory to the stage of change; ensure that they do not jump ahead of the patient
- Express acceptance and affirmation
- Affirm the patient's freedom of choice and self-direction

emphasises the patient's autonomy and right to choose whether to accept and make use of the therapist's knowledge and skills.

Instead of trying to fix the patient's health problem by forceful instruction, therapists need to use warmth and respect to persuade the patient to want to change. The process of motivational intervention is outlined in Fig. 1. Its aim is twofold: to increase the importance of change and to bolster the patient's confidence that change can happen. Motivational therapists have to be able to suppress any propensity they might have to show the 'righting reflex', i.e. to try to solve problems and set things right (this is not easy because health professionals are drawn into the field because they want actively to help others). Motivational therapists have to be flexible and be able to have an appropriate balance between acceptance and drive for change.

Motivational interviewing helps change patterns of behaviour that have become habitual. It works in small doses to produce a large effect. It seems to work by reducing behaviours in the patient that interfere with therapy. Patient attributes regarded as markers of a poor prognosis, such as anger and low motivation, are less serious obstacles with motivational interviewing.

The evidence base

Miller and his group at the Center on Alcoholism, Substance Abuse, and Addictions (CASAA) in Albuquerque demonstrated that the style of the therapist's interaction is a critical component in facilitating change (for a review of this literature, see Miller, 1995). Therapists' expectations of change in their patients influenced patients' adherence and outcomes. The rate of patient resistance varied as a response to the therapeutic style: confrontation produced high levels of resistance, whereas a patient-centred approach reduced opposition.

Miller developed a short intervention (the Drinker's Check-Up) which operationalised some of the factors found to be useful in increasing motivation. Motivational feedback using this instrument was compared with feedback that used a standard confrontation-based approach. The outcome, in terms of drinking 1 year later, was poorer in the group of patients who were given confrontational feedback (Miller *et al*, 1993). In a further study it was found that, if the motivational feedback of the Drinker's Check-Up was given as an initial intervention prior to admission to an in-patient clinic, outcome was improved (abstinence rates 3

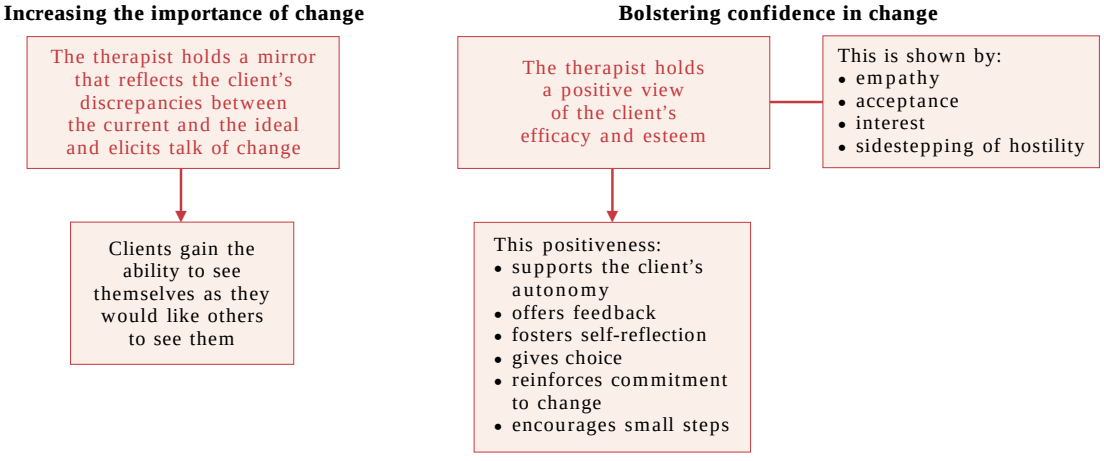

Fig. 1 How motivational therapy works.

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months after discharge doubled to 57%, compared with 29% without the intervention). The therapists (unaware of group assignment) reported that patients given this intervention had participated more fully in treatment and appeared to be more motivated (Bien *et al*, 1993; Brown & Miller, 1993). The approach has been modified for pregnant women who drink. A similar intervention, developed for polydrug misuse, was found to be effective in pilot studies. However, this was not replicated in a later full study. The explanation for this was evident from analysis of the transcripts of the sessions. The need to complete the process of commitment to change within one session interfered with development of the patients' motivation, and some therapists were moving ahead of the patient in an attempt to complete the protocol (Miller *et al*, 2003).

Project MATCH: alcohol misuse

Motivational interviewing has been developed into a manualised four-session therapeutic intervention called motivational enhancement therapy for alcohol (Miller *et al*, 1994). This was used for the motivational interviewing intervention in Project MATCH (Box 3), the largest clinical trial ever conducted for alcoholism treatment methods. In this collaborative study, involving nine clinical sites in the USA, 1726 patients were randomly assigned to one of three interventions: 12 sessions of 12-step facilitation therapy, or 4 sessions of motivational enhancement therapy, or 12 sessions of cognitive–behavioural skills training. Five sites treated outpatients, and five gave intensive hospital in-patient treatment. Overall, the three treatment modalities yielded substantial and equivalent outcomes for up to a year following treatment (Project MATCH Research Group, 1998).

The primary aim of Project MATCH was to examine whether it was helpful to match patients to specific forms of intervention. Over the 3 years of the follow-up period it was found that patients with higher state-trait anger responded best to motivational enhancement therapy (Project MATCH Research Group, 1997). It was concluded from the project that motivational interviewing is a cost-effective technique to facilitate change in patients who might be resistant to treatment.

Other problem behaviours

Manuals of motivational enhancement therapy are also available for cannabis misuse, polydrug misuse (Miller, 2003) and bulimia nervosa (Treasure & Schmidt, 1997).

Motivational interviewing has been found to be effective for various forms of behaviour change (for full details the systematic reviews of Dunn *et al* (2001) and Burke *et al* (2003) are recommended). Adaptations of motivational interviewing have been found to be useful for people whose problems involve alcohol, drugs, diabetes, dual diagnosis and bulimia. Mixed results have been found for its efficacy in smoking. Moderate treatment effect sizes of between 0.25 and 0.57 have been found for adaptations of motivational interviewing.

A detailed, regularly updated bibliography on the application of motivational interviewing for various clinical conditions can be found at http://www.motivationalinterview.org. It is now being applied more widely in psychiatry to address poor treatment adherence in conditions such as psychosis (Healey *et al*, 1998), eating disorders (Treasure & Schmidt, 1997) and comorbidity with drug and alcohol misuse (Barrowclough *et al*, 2001). It can also be used to improve the general health of patients with psychiatric disorders by focusing on maladaptive elements of their lifestyle, for example smoking, weight gain and inadequate exercise.

What is effective implementation?

The process of change within motivational interviewing interventions has been studied in order to highlight the key strategies needed for their implementation. Miller *et al* (1993) found that a low level of resistance within the session predicts change. Resistance often arises in the presence of confrontation, and if the therapist behaves in a way that minimises resistance, change follows. An increase in the rate of 'self-motivational statements' (utterances by the patient that express interest in and/or intent to change) is positively associated with behaviour change.

Therapists differ in their adherence to the principles of motivational interviewing. Within Project MATCH, in which there was intensive training and monitoring to ensure equitable delivery between therapists, therapist effects on outcome persisted even after controlling for the effects of other variables. Empathy is a strong predictor of therapist efficacy. Other elements, which are more difficult to put into practice, include communicating belief in the patient's abilities and judgement, i.e. hope, respect, possibilities, freedom to change, and faith in the person. The role of the therapist is to respect the patient and to hold an optimistic concept of the patient's potential for goodness (high self-esteem and self-efficacy) and to help the patient work within this framework. The therapist needs to be able to shift flexibly between acceptance and change.

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Box 3 Information sources and manuals

The standard text on motivational interviewing is *Motivational Interviewing: Preparing People for Change* (Miller & Rollnick, 2002)

The Motivational Interviewing website gives information about the approach, training courses, research, abstracts, videos and so on (http://www.motivationalinterview.org)

The Motivational Interviewing Skill Code (MISC) (http://casaa.unm.edu/download/misc.pdf) and the Motivational Interviewing Treatment Integrity (MITI) code (http://casaa.unm.edu/download/miti.pdf) are assessment instruments that may be used to maintain quality assurance in motivational interviewing

Manuals for motivational enhancement therapy in alcohol and drug misuse (Miller *et al*, 1994; Miller, 2003) and bulimia nervosa (Treasure & Schmidt, 1997)

The Project MATCH website is at http://www.commed.uchc.edu/match/default.htm. Manuals of the treatment procedures used in the project are available from http://www.commed.uchc.edu/match/pubs/monograph.htm

Training courses in motivational interviewing have mostly been relatively short (2–3 days). Miller and colleagues evaluated the effectiveness of a 2–3 day training workshop in motivational interviewing for counsellors by studying samples of practice before and after the course (Miller & Mount, 2001). They found statistically significant changes in the behaviour of the counsellors consistent with the principles of motivational interviewing, but these changes were not large enough to make a difference for patients. Thus, continued practice, supervision and monitoring are needed in addition to 3-day training to attain and maintain standards.

The Albuquerque group led by Miller is developing instruments to measure therapist adherence to motivational interviewing principles. Two of these are now available: the Motivational Interviewing Skill Code (MISC) and the Motivational Interviewing Treatment Integrity (MITI) code (Box 3).

Theory

Although motivational interviewing started from a basis of clinical empiricism, several theoretical models (e.g. the transtheoretical model of change, which is decribed below, and dissonance theory) have been borrowed to provide an academic framework.

Models of health behaviour change

The basic principle that underpins most models of health behaviour change is that people hold a range of representations about their problematic symptoms and behaviours. For example, at one extreme are individuals who are stoical or in denial and neglect themselves or their symptoms. At the other are those who display abnormal illness behaviour and readily adopt the sick role. Most models of health behaviour change include the idea that there are at least two components to readiness to change. These are importance/conviction and confidence/self-efficacy (Keller & Kemp-White, 1997; Rollnick *et al*, 1999), encapsulated in the adage 'ready, willing and able'. 'Importance' relates to why change is need. The concept includes the personal values and expectations that will accrue from change. 'Confidence' relates to the person's belief that they have the ability to master behaviour change. Motivational interviewing works on both of these dimensions by helping the patient to articulate why it is important for them to change and by increasing self-efficacy so that they have confidence to do so.

The transtheoretical model of change

Often there is confusion between and fusion of motivational interviewing and the transtheoretical model of change developed by Prochaska and co-workers (Prochaska & Norcross, 1994; Prochaska & Velicer, 1997).

The transtheoretical model of change breaks down the concept of readiness to change into stages, from not even thinking about it to maintaining change once it is made (Box 4). One of the implications of this model is that for each stage certain helping behaviours are particularly constructive.

Motivational interviewing and the transtheoretical model of change developed separately but synchronously. Motivational interviewing had no theoretical backbone, and the transtheoretical

Box 4 The stages of change in the transtheoretical model

1 Precontemplation, not even ready to think about change seriously
2 Contemplation, ready to think about change
3 Determination, preparing to make plans for change
4 Action, implementing change
5 Maintenance, ensuring that the change in behaviour becomes habitual

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model filled some of this vacuum. Motivational interviewing is the type of process that is useful for people who are in the early stages of change. DiClemente, who worked with the Rhode Island group developing the transtheoretical model, was a co-author of the manual on motivational enhancement therapy used for project MATCH (Miller *et al*, 1994).

Resistance to behaviour change

Two forms of resistance can impede behaviour change. The first relates to the 'problem' that is being considered and the second to the patient–therapist relationship. As regards the 'problem', there may be a conflict between the individual's conceptualisation of their behaviour and that of the family or society. Thus, individuals with, for example, anorexia nervosa or drug and alcohol misuse may not see any need to change their behaviour and will have been coerced into treatment by family and friends or statutory agencies. Human beings are inherently intolerant of lack of choice and can become motivated to do the opposite of what is requested: so-called 'reactance'. The propensity to this response lies on a behavioural dimension, with the poles ranging from oppositional to compliant.

The other source of resistance, the patient–therapist relationship, often relates to the patient's representations of helping / parental / authoritarian relationships or values about individual rights.

Individuals who are prone to both types of resistance are those with high levels of anger, aggressiveness and impulsivity and those with a need for control and with high levels of avoidance.

The effect of resistance in therapy has been reviewed in several studies by Beutler and colleagues (Beutler *et al*, 2002). Resistance, which is marked by anger or defensiveness, is associated with a poor outcome to therapy.

Motivational interviewing has an explicit focus on resistance in therapy. Indeed, in Project MATCH motivational interviewing was most effective in people who were angry. Within motivational interviewing there are special techniques to work with resistance. These are variations on reflective listening such as 'amplified' reflection, in which the patient's resistance and 'negative change' position is overstated. This works on the assumption that the oppositional tendency of the patient will lead to a withdrawal back to the middle ground. Another approach is to use a 'double-sided' reflection, which highlights the patient's ambivalence. The emphasis is on the individual's autonomy in the matter of change.

Motivational strategies in practice

The following examples of patient–therapist dialogue illustrate the use of some of the motivational techniques mentioned above. The patient is a young woman who attends an eating disorders clinic and is subsequently admitted to hospital to receive specialist treatment for severe weight loss.

Eliciting concerns – statements that affirm the need to change

The following open question is linked to a starting sentence setting the scene by acknowledging the ambivalence or resistance that is common in people with anorexia nervosa attending a clinic.

Therapist: Usually when people come to this clinic the driving force behind it has been other people such as their families or doctors. Please can you tell me how you got to come here today?

Patient: Well, my mother has been worried about me and kept nagging at me to do something.

Therapist: Your mother is concerned about your health. [A simple reflection.]

Patient: Yes, she says I am too thin. She keeps crying and says that my heart might stop.

Therapist: Have you noticed any health difficulties that suggest that there might have some grounds for her concerns? For example, can you tell me about your periods? [This sentence sets the scene for eliciting concerns by encouraging the young woman to take an external perspective, in order to sidestep her resistance. The therapist opens up the conversation, focusing on the domains in which there are common difficulties in anorexia nervosa.]

Sidestepping resistance

It is important to try not to join in with a patient's anger and not to confront the patient. Instead, the therapist should reflect back the emotion of the outburst and take a low power position.

Patient: I'm just going to leave here and lose weight again!

Therapist: You're angry that after all the work you've done as an in-patient things don't feel much different. I'm sorry that the team haven't been able to help you be able to recognise the need to nurture yourself. I'm sorry that we've been unable to help enough. [In this statement the therapist reflects the anger that underlies the patient's statement and expands on the meaning behind it, which is that the in-patient team has failed to live up to expectations.]

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Reflecting ambivalence – the use of double-sided reflections

The therapist sidesteps a confrontational response to the following statement by making a double-sided reflection that highlights the patient's ambivalence about change.

Patient: I am not prepared to let my weight go above 35 kg.

Therapist: You're terrified about what will happen if you start to attend to your nutritional needs [empathy with the fear of change] and you know that there are clear signs that your body is suffering when your weight is below 40 kg – for example your blood glucose runs at a dangerously low level and your bones are continuing to dissolve.

Conclusions

Motivational interviewing has many applications within psychiatry, as it is particularly helpful for use in settings where there is resistance to change. The principles are simple but practice is less easy, and stringent quality control is needed to ensure that therapists adhere to the spirit of the process. However, once the overall skill is integrated, honed and maintained it can be adapted to many situations. Practitioners following the implications of the transtheoretical model of change are flexible in their use of interventions. They might use a style of practice based on motivational interviewing for patients who are undecided about change (in pre-contemplation and contemplation) and later shift to a style of therapy informed more by cognitive–behavioural techniques when the person is committed to change. This is where the art and judgement of therapy come into play. People do not simply switch into a stable motivational state. A sensitive and empathic therapist will know when to back off from a skills-based approach into a more motivational stance. Unfortunately, time-limited and manualised therapies do not lend themselves to such an approach. There always needs to be room for flexibility to adjust for individual differences in the readiness to change.

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MCQs

1 Motivational interviewing:
a encourages the family of a person with alcoholism to set up a session in which they confront that family member about their problem
b has relevance only for drug and alcohol problems
c is the therapeutic process devised by the research group that developed the transtheoretical model of change
d requires the therapist to feed back to the patient the impact that their utterances have on the therapist and, by implication, on others
e was found to be less cost-effective than cognitive–behavioural therapy in Project MATCH.

2 Motivational interviewing:
a is used as part of the Drinker's Check-Up
b is used to assess stage of change
c is only useful for the addictions
d is used as part of motivational enhancement therapy
e is a type of questioning used in cognitive–behavioural therapy.

3 Strategies in motivational interviewing include:
a constructing decisional balance matrices
b setting tasks such as activity scheduling
c developing a discrepancy between current behaviours and lifetime goals and values
d challenging negative thoughts
e interpreting unconscious conflict.

4 One of the techniques of motivational interviewing is to:
a detect thinking errors
b use Socratic questioning
c emphasise personal choice and control
d summarise
e teach problem-solving.

5 Within the practice of motivational interviewing:
a competence is measured with the MISC
b at least 20% of the session should be spent confronting the patient with the consequences of their behaviour
c it is important to teach assertiveness
d 10% of the session is devoted to relaxation training
e a minimum of 10 sessions is usual practice.

MCQ answers

1	2	3	4	5
a F	a T	a T	a F	a T
b F	b F	b F	b F	b F
c F	c F	c T	c T	c F
d F	d T	d F	d T	d F
e F	e F	e F	e F	e F

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