

Changing behaviour: using motivational interviewing techniques

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Behaviour is the result of the interaction between what we believe and how we feel. If we want to change behaviour it is necessary to change the underlying beliefs and feelings related to that behaviour. We are all creatures of habit and purposeful behaviour change is both difficult to achieve and even more difficult to maintain. There are many factors that influence whether we achieve behaviour change in a health context, of which the level of intrinsic motivation or *intention* to change that behaviour is but one. Other significant factors that influence behaviour change include the beliefs underlying the behaviour; the value of it; the perceived costs and benefits of changing; the barriers to changing; beliefs about our ability to perform the behaviour change; and not least the support and reinforcement of others.

Until recently it was assumed that if people were informed about the risks associated with unhealthy behaviour this would be sufficient for them to change to a healthier pattern. The large amounts of investment in the health education movement for relatively little return proved this was not the case. People's beliefs are not based simply on what they are told to believe. Contemporary models of health promotion are a good deal more sophisticated and take account of beliefs about health and illness *and* how those beliefs relate to behaviour. Large-scale interventions to produce change in health behaviour at the population level are gathering apace and a significant proportion of population health activity is focused on changing risk behaviours for, most notably, heart disease, stroke or diabetes. There is evidence that health behaviours can be influenced by health promotion techniques at the population level,^{1,2} but significant proportions of patients with health problems do not achieve change in health risk behaviour, and even fewer maintain changes to risk status. It remains a significant problem for health care planning.

BEHAVIOUR CHANGE IN THE CONTEXT OF CHRONIC ILLNESS

The need to change or manage behaviour in relation to a health problem adds another level of complexity. Many

people make the assumption that the diagnosis of a health problem is sufficiently motivating to produce an associated reduction in risk related to that health problem. This is not always the case. For example, following a myocardial infarction the proportion of people who successfully manage to quit smoking is around one-half.^{3,4} Furthermore around 40% of all patients needing to take antibiotics fail to do so appropriately, and roughly the same percentage (38%) of people needing medication to treat tuberculosis do not take it appropriately.⁵

Many patients with a chronic illness have to endure physically debilitating and psychologically challenging treatments and most, if not all, chronic illnesses require a degree of self-management that demands high levels of continued motivation. Cystic fibrosis (CF) is one such condition. The level of psychological morbidity associated with chronic illness in general is estimated at 30%. No reliable figures are available for the relevance of psychological morbidity among patients with CF. Therefore, the combination of significant psychological burden of chronic illness and the increased demand to be actively involved with managing an often complex medical regimen do not provide ideal conditions for sustaining behaviour change.

MOTIVATIONAL INTERVIEWING

Motivation is a state of readiness or eagerness to change.⁶ Motivational interviewing (MI) is a relatively new cognitive-behavioural technique that aims to help patients identify and change behaviours that may be placing them at risk of developing health problems or may be preventing optimal management of a chronic condition. It is a relatively simple, transparent and supportive talk therapy based on the principles of cognitive-behaviour therapy. These principles are to help the patient:

- to understand his or her thought processes related to the problem
- to identify and measure the emotional reactions to the problem
- to identify how thoughts and feelings interact to produce the patterns in behaviour
- to challenge his or her thought patterns and implement alternative behaviours.

MI takes its theoretical basis from the Transtheoretical Model, more commonly known as the Stages of Change Model, developed by Prochaska and DiClemente.⁷ This model identifies a cycle of change that people rotate through, sometimes up to seven times, before effecting permanent change. These stages include *pre-contemplation*, when the individual is not considering change; *contemplation*, when they are favourably disposed to change but have not made concrete plans or adopted any action; *planning*, when strategies have been selected but not yet used; and *action*, when attempts have been made to, for example, stop smoking, lose weight or adhere to some other health advice; and finally the *maintenance* phase, when people make deliberate attempts to continue with the change programme (Figure 1). The model also differentiates between a lapse (a temporary return to the previous behaviour) and a relapse (a permanent return to the behaviour being changed).

Motivational strategies include eight components that are designed to increase the level of motivation the person has towards changing a specific behaviour. These behaviours are not generalizable, that is, if a person is highly motivated to quit smoking it does not necessarily follow that they are highly motivated to take exercise or eat less fat.

These components include:

- *giving advice* (about specific behaviours to be changed)
- *removing barriers* (often about access to particular help)
- *providing choice* (making it clear that if they choose not to change that is their right and it is their choice; the therapist is there to encourage change but not insist on change)
- *decreasing desirability* (of the ambivalence towards change or the *status quo*)
- *practising empathy*

- *providing feedback* (from a variety of perspectives—family, friends, health professionals—in order to give the patient a full picture of their current situation)
- *clarifying goals* (feedback should be compared with a standard (an ideal), and clarification of the ideal can provide the pathway to the goal)
- *active helping* (such as expressing caring or facilitating a referral, all of which convey a real interest in helping the person to change).

Much of the evidence base for MI comes from the addictions literature,^{8–10} but is beginning to be applied to the fields of chronic illness management, when it has been shown to help people with heart disease quit smoking and people with diabetes to achieve better control of blood glucose.^{11–13}

The overall aim of MI is to identify what maintains behaviours, including the ambivalence about change, and to encourage and support people in adopting new behaviours. This is done in a supportive way with the therapist accepting the patient’s perspective and reflecting it rather than challenging it. The challenge should come from the patient recognizing there are alternatives to the *status quo*.

CREATING THE CONDITIONS FOR CHANGE

MI has five basic principles:

- 1 express empathy
- 2 avoid argument
- 3 support self-efficacy
- 4 roll with resistance
- 5 develop discrepancy.

Expressing empathy

Empathy is fundamental to all talk therapies. It is not so much identifying with a person’s experience or expressing sympathy and above all it is not simply being kind to people. Demonstrating empathy is conveying a real, i.e. informed, understanding of the person’s predicament and what maintains the ambivalence. It demands active listening and reflection so that the therapist can provide concise statements that encapsulate what the patient has tried to convey.

Reflecting to the patient ‘I hear what you say about living with CF and understand how difficult it is for you to go through the same routine every single day as you have told me’ conveys both understanding of the monotony of the routine and the underlying emotion of dismay or frustration. This conveys understanding, acceptance and interest in the person—conditions that have been found to be necessary for change to occur. It is an acceptance without judgment of the person. This does not mean that

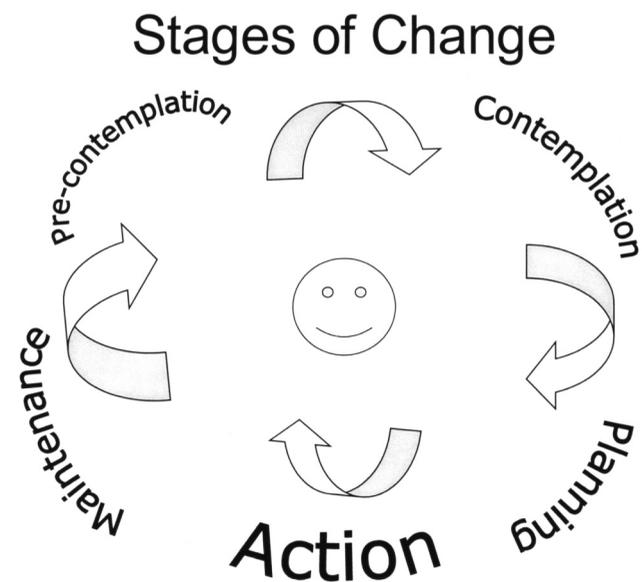


Figure 1 Cycle of change (after Prochaska and DiClemente⁷)

every *situation* is acceptable but every *person* is. Only when the patient perceives this acceptance can they experiment with alternative ways of behaving.

Avoiding argument

Arguments are counterproductive. MI is in and of itself challenging and confrontational: it questions how much someone wants to achieve a change. If the therapist actively challenges the patient's position then the patient will defend him- or herself and present arguments for not changing. This is quite opposite to what MI tries to achieve. It is not helpful to hear oneself rehearse arguments for not changing. The goal of MI is to encourage the patient to hear themselves say why they want to change. The maxim 'we begin to believe what we hear ourselves say' holds true. If the therapist is not listening to the reasons why it is difficult to stick to a very rigid diet then the patient will work harder to convince the therapist that the reasons are legitimate and that he or she, the patient, is not simply being neglectful or difficult. These arguments are consolidated in the patient's mind and resistance to change is increased.

Supporting self-efficacy

Belief in one's ability to make a change and stick to it is fundamental to that change. You may want to use this as an outcome of a MI intervention, as increased self-efficacy is predictive of improved mental health. Encouraging the patient to make overt positive statements that reflect a sense of self-efficacy will help to 'reframe' his or her thinking. People who have tried change are used to listening to the sound of our voice saying they failed or could not do it. The therapist's job is to draw out of the patient statements that counterbalance that view. If a patient is saying to you 'I have tried lots of times to quit smoking/lose weight/put on weight, etc.' It is tempting to 'hear' the rider 'and I've failed. I'm a failure'. It could be reframed as a reflection on: (a) the person knowing what needs to change; (b) being motivated to keep going under difficult circumstances; and (c) willing to accept help to achieve this goal. If the patient accepts this perspective ask them to repeat in their own words your reflection so that they 'hear' it once from you and once from themselves.

Rolling with resistance

The skill of rolling with resistance is more difficult than some of the others outlined above. The aim is to not argue with the statement but delicately challenge the thought processes that underlie the behaviour one wants to change. When done skilfully it can shift the patient's perspective of the situation. Questioning, asking for clarification and

elaboration (sometimes even exaggeration of the position) can help the patient to see the incompatibility between beliefs that maintain the discrepancy between where they are and where they want to move to. New perspectives can be offered but should not be imposed. The patient who reels off a list of reasons for not adhering strictly to the regimen prescribed can be reassured by a statement that acknowledges that even a saint would find it impossible to comply with impossible instructions. Humour can lighten the mood and, if used skilfully, the patient can feel as though the session has given them a less serious perspective on a problem that was wearing them down. It helps the patient to see that therapists can be fun to be with also!

Developing discrepancy

The person needs to have goals to work towards. In addition they need to be aware that their current situation has consequences. Goals should be generated by the patient himself or herself and not imposed on them. The exercise of getting the patient to outline their goals gives the therapist valuable insight into how realistic these goals are and what is the priority for change. For the young woman with CF who wants to wear a bikini on a summer holiday the priority relating to diet may not be to put on weight! When appropriate goals are established then the therapist can start to identify the difference between the current and ideal situation; this generates some dissonance or conflict in the patient's mind. Discrepancy is amplified between where the patient is currently and where they want to be. Once the patient has accepted the arguments for change are based on incompatible beliefs of 'X is where I want to be but Y is where I am', then with appropriate support he or she can start to move along the cycle of change.

HOW TO DO IT

Miller and Rollnick⁸ outline the eight steps of MI that allow the therapeutic process to work. These are outlined below:

- 1 establishing rapport
- 2 setting the agenda
- 3 assessing readiness to change
- 4 sharpening the focus
- 5 identifying ambivalence
- 6 eliciting self-motivating statements
- 7 handling resistance
- 8 shifting the focus.

Establishing rapport

It takes time for the patient to learn to trust the therapist is not there to judge, cajole or bully them into changing. This is not a technique you can mix with judging, cajoling or bullying: patients will simply not believe you are genuine

with them if you do. Time and place are important. Make time for a session that starts clearly and finishes with the patient being clear about what has been covered. A private room, emphasis on confidentiality and clarity about what your role is are also important. Your role as therapist is to do the above: develop discrepancy, support and encourage self-efficacy, give advice, provide feedback and clarify goals. It is not to impose a prescription of change or threaten to withhold services or resources from the patient. Rapport is the basis of trust and trust is essential if change is going to be attempted.

Setting the agenda

Many people when they embark on a change programme attempt too much and/or too quickly. The patient should set the agenda for change but with feedback from the therapist as to what the patient prioritizes, the difficulties they are aware of (or not aware of), and how achievable the goal is given the resources available. Imposed agendas are counter-productive. The agenda should be revisited at regular intervals to see whether priorities have changed and to reinforce progress.

Assessing readiness to change

Asking simple questions such as 'On a scale of 1 to 10 how keen are you to...?' will give insight into the level of motivation. This can then be challenged gently (increasing discrepancy): 'You said 4, that is more than 3. Why not 5? Are you sure it is not 5? What makes you sure?' The reason for this probing is to give you more information about possible barriers or support for change. Probing for *readiness*, *willingness* and *ability* to change is an important part of the MI process and it should not be assumed they are one and the same. It is possible to be willing but not ready, able but not willing, and so on. Sharing the reason for your questioning is a good way to build rapport and to teach the patient MI skills. Patients usually want to understand why you are asking particular questions and can use the techniques on themselves or others. Giving away MI skills is a good thing.

Sharpening the focus

After the initial sessions aimed at identifying what the patient wants help with, the next sessions should focus on precisely what the patient wants to change. Most behaviour patterns are just that: patterns made up of different components. It may be unrealistic to attempt to change everything at once and pose a seemingly impossible task, thereby increasing the likelihood of failure. Breaking down the pattern into its component parts can help the patient to focus on specific behaviours. This not only helps them to

see how patterns are maintained, but also makes the task seem more achievable.

Identifying ambivalence

Ambivalence is normal and is being expressed if the patient disagrees, argues, denies or ignores a statement of reflection or requests for elaboration. This is not to say the therapist knows best and patient should accept everything, but rather that if the therapist is working with the information that the patient is offering and not interpreting or hurrying change, there should be no reason for the disagreement. It is not a sign of the patient being difficult or unhelpful but an indication that there are reasons for and against change. This can be reflected to the patient because it is a true statement. If there were no reasons to maintain unhelpful behaviours they would not occur. It is helpful to explain the concept of ambivalence. This way you are reinforcing the non-judgmental nature of your observations.

Eliciting self-motivating statements

Take every opportunity to encourage the patient to phrase things in a positive way and to highlight successes. Asking what would be the best outcome from a course of action for the patient encourages them to see possibilities and envisage success. Rather than accept the passive 'If only I could do...', encourages them to rephrase it as 'I am keen to...' Use these opportunities to summarize and paraphrase the statement the patient makes so that they hear it more than once. If the patient responds with resistance ('Well, I wouldn't go so far as to say keen') this can be elaborated: 'So what word would you use instead of keen?'

Handling resistance

Reflection is a powerful way of handling resistance. Expressing in succinct ways what you the therapist are observing and hearing is important; it is also tiring. It may seem simple in a skilled practitioner's hands but it demands full attention to the words, meaning (for the patient) and emotional content. Box 1 is an example of how to counter resistance.

Shifting the focus

Helping people around a barrier can be a way of handling resistance also. In response to a question about why the patient in Box 1 repeatedly cancels clinic appointments, the patient offers the statement: 'I quite like the staff here [the CF clinic], but I don't see it has to be in a hospital as it's not easy to get here and like you see so many ill people around all the time, you feel like a *terminal case*.' The therapist can reflect some barriers—hospital is not conveniently located,

Box 1 An example of how to counter resistance

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| Therapist: Tell me some of the reasons why you cancel or change your appointments frequently | Request for information or elaboration and attempt to identify a barrier to keeping appointments |
| Patient: Well don't put it like that. It doesn't happen <i>that</i> frequently, only once or twice this last three months | Minimizing |
| Therapist: So you don't feel it is often and that I might have exaggerated or used the wrong words? | Reflection and rolling with the resistance |
| Patient: Yeah! | |
| Therapist: At least we agree on something! Maybe this is an area that is more complicated than just missing appointments. Would you like to come back to this another time? | Using humour to re-establish rapport, avoid confrontation, re-establishing the agenda |

other ill people, etc.—but if the patient needs to come to the hospital it is not productive to focus on that. Instead the therapist should shift to the beliefs underpinning the behaviour (seeing other ill people makes him feel like a *terminal case*). Exploring why seeing ill people is distressing appears to be an important area in the statement above. The therapist could first acknowledge the power of the statement and ask if it should go on the agenda. One way to acknowledge this would be to say ‘Seeing so many ill people all together in the hospital can be off-putting—some people get quite frightened by it—and feeling like a “terminal case” is not something you need right now. I guess you will let me know when you want to talk some more about this.’

CONCLUSION

Thoughts and feelings combine to produce behaviour. Therefore, changing behaviour involves changing thoughts and feeling too. Throughout this paper the emphasis has been on behaviour and not on personality or character traits. This is a deliberate attempt to reinforce the view that behaviour patterns are learned and therefore can be changed. It is not easy to make sustained changes; if it were there would be no need for MI.

In the context of a chronic illness the additional burden of low motivation, confusion about reasons for change or lack of support to make desirable change combine to make sustained change unlikely. There is a need for a different approach than simply instructing the person to change or gently giving yet more information in the hope they may do so in their own time. Guided, structured focus on the reasons for, and ways of, changing is likely to be of more help.

MI is a form of talk therapy, a technique that can be learned by people who can listen and who are motivated to help others find new ways to change aspects of their behaviour. It is not quick and not easy to do consistently. It is particularly difficult, if not impossible, to do in the traditional clinical setting where space and privacy are not easily obtained. However, once learned, MI is not easily

forgotten. It demands a shift in thinking akin to knowing what an elephant looks like: you either do or you don't. You cannot un-know how to use MI but you can choose to use it or not. It is another tool to use when the circumstances are appropriate, but like all tools it can become rusty if not used frequently. A skilled worker is an effective one and a pleasure to watch.

REFERENCES

- 1 Puska P, Nissinen A, Tuomilehto J *et al*. The community based strategy to prevent coronary heart disease: conclusions from the 10 years of the North Karelia Project. *Am Rev Public Health* 1985;6:147–93
- 2 MRFIT Research Group. MRFIT: risk factor changes and mortality results. *JAMA* 1982;248:1465–77
- 3 Rea TD, Heckbert SR, Kaplan RC, Smith NL, Lemaitre RN, Psaty BM. Smoking status and risk for recurrent coronary events after myocardial infarction. *Ann Intern Med* 2002;137:134
- 4 van Berkel TF, van der Vlugt MJ, Boersma H. Characteristics of smokers and long-term changes in smoking behavior in consecutive patients with myocardial infarction. *Prev Med* 2000;31:732–41
- 5 Ley P. Communication in the clinical setting. *Br J Orthod* 1974;1:173–77
- 6 Miller WR, Rollnick S. *Motivational Interviewing*. London: Guilford Press, 1991
- 7 Prochaska JO, DiClemente CC. Transtheoretical therapy: towards a more integrative model of change. *Psychother Theory Res Prac* 1982;19:276–88
- 8 Burke BL, Arkowitz H, Menchola M. The efficacy of motivational interviewing: a meta-analysis of controlled clinical trials. *J Consult Clin Psychol* 2003;71:843–61
- 9 Dunn C, Deroo L, Rivara FP. The use of brief interventions adapted from motivational interviewing across behavioural domains: a systematic review. *Addiction* 2001;96:1725–42
- 10 Jones H, Edwards L, Vallis TM, Ruggiero L, Rossi SR, Rossi JS, *et al*. Findings of a pilot study of motivational interviewing with pregnant drinkers. *J Stud Alcohol* 1999;60:285–7
- 11 Channon S, Smith VJ, Gregory JW. A pilot study of motivational interviewing in adolescents with diabetes. *Arch Dis Child* 2003;88:680–3
- 12 Vallis M, Ruggiero L, Greene G, Jones H, Zinman B, Rossi S, *et al*. Stages of change for healthy eating in diabetes: relation to demographic, eating-related, health care utilization, and psychosocial factors. *Diabetes Care* 2003;26:1468–74
- 13 Prochaska JO, Zinman B. Changes in diabetes self-care behaviors make a difference in glycemic control: the Diabetes Stages of Change (DISC) study. *Diabetes Care* 2003;26:732–7