

Motivational Interviewing and the Stages of Change

Carlo C. DiClemente, Ph.D.
University of Maryland, Baltimore County
Baltimore, Maryland

Mary M. Velasquez, Ph.D.
University of Texas Medical School
Houston Texas

Corresponding Author:
Carlo C. DiClemente, Ph.D.
Department of Psychology
University of Maryland, Baltimore County
1000 Hilltop Circle
Baltimore, MD 21250 USA
401-455-2415 fax 410 455-1055

Chapter 15 in the book by Rollnick, S. & Miller, W.R., Motivational Interviewing. Guilford Press.

THE TRANSTHEORETICAL MODEL

The notion that behavior change involves a process that occurs in increments and that involves specific and varied tasks is at the heart of the Transtheoretical Model of intentional human behavior change (TTM; Prochaska & DiClemente, 1983; 1994; DiClemente & Prochaska, 1985; 1998). This model offers an integrative framework for understanding the process of behavior change whether that change involves the initiation, modification or cessation of a particular behavior. The Stages of Change represent a key component of the TTM and describe a series of stages through which people pass as they change a behavior. In this model change is viewed as a progression from an initial Precontemplation stage, where the person is not currently considering change, to Contemplation, where the individual undertakes a serious evaluation of considerations for or against change, and then to Preparation where planning and commitment are secured. Successful accomplishment of these initial stage tasks lead to taking Action to make the specific behavioral change which, if successful, leads to the final and fifth stage of change, Maintenance, in which the person works to maintain and sustain long-term change (DiClemente & Prochaska, 1998; Prochaska, DiClemente, & Norcross, 1992). These stages appear to be applicable to the larger process of behavior change whether that change occurs with or without the help of a therapist, an intervention, or a treatment program.

Research has isolated the stages of change across a range of health risk and health protective behaviors. Application of these stages and support for the varied aspects of the process of change represented by these stages have been demonstrated in many behavior changes from cessation of smoking, alcohol and drugs to mammography screening, dietary modification, gambling, exercise adoption, condom use and pregnancy prevention (Carney & Kivlahan, 1995; DiClemente & Hughes; DiClemente, Story & Murray, 2000; DiClemente & Prochaska, 1998; Glanz et al., 1994; Grimley, Riley, Bellis & Prochaska, 1993; Isenhardt, 1994; Marcus, Rossi, Selby, Niaura, & Abrams, 1992; Weinstein, Rothman & Sutton, 1998; Werch & DiClemente, 1994; Willoughby & Edens, 1996). Thus, although the behavior change targets differ, the structure of the change process appears to be the same. Individuals move from being unaware or unwilling to do anything about the problem to considering the possibility of change, then to becoming determined and prepared to make the change, and finally to taking action and sustaining or maintaining that change over time.

GROWING UP TOGETHER

The Transtheoretical Model, in particular the Stages of Change aspect of the model, have played an integral role in the development of Motivational Interviewing and brief interventions using a motivational approach (DiClemente, 1999a; Miller & Rollnick, 1991; Rollnick, Mason & Butler, 1999). The TTM view of behavior change as a series of gradual steps involving multiple tasks and requiring different coping activities rather than a single dimension or an "all or none" process, has led to a significant change in the way behavioral health professionals conceptualize health behavior change (DiClemente, 1999b; Joseph, Breslin & Skinner, 1999; Shaffer, 1992; Weinstein, Rothman & Sutton, 1998). However, moving through the stages of change requires effort and energy for thinking, planning and doing. Motivation is what provides the impetus for the focus, effort and energy needed to move through the entire process of change (DiClemente,

1999a; Rollnick Mason & Butler, 1999; Simpson & Joe, 1993). Thus, Motivational Interviewing can be used to assist individuals to accomplish the various tasks required to transition from Precontemplation stage through the Maintenance stage. Although a client's motivation to begin thinking about changing a particular behavior differs somewhat from the motivation to sustain the effort and energy and maintain a behavior change, motivation is needed from the beginning to the end of the process of change (CSAT TIP #35).

The most obvious connection between Motivational Interviewing and the Stages of Change is that Motivational Interviewing is an excellent counseling style to use with clients who are in the early stages. Precontemplators do not want to be lectured to, or given "action" techniques when they are not ready to change. Likewise, contemplators, who are considering the possibility of making a change but are not quite ready to make a commitment, are resistant to more traditional approaches that encourage (or try to force) them to make changes for which they are not yet ready. Through the use of Motivational Interviewing strategies, clinicians facilitate clients in examining their own particular situations, considering the pros and cons of changing, and making decisions about change. This is done in a non-threatening and supportive manner that encourages the client to take responsibility for his or her own situation. The Motivational Interviewing philosophy, approach and methods are uniquely suited to addressing the tasks and emotional reactions of individuals moving through the first two stages of change.

Clinicians have also found that Motivational Interviewing to be a very effective style to use with clients in the later stages as they prepare for change, take action, and maintain the change over time. Miller and Rollnick (1991) have called this "Phase II" of Motivational Interviewing. This is the point at which the client has made a decision to change. In this phase, the clinician's job changes from one of motivating the client to one of advising and "coaching" as the client develops a workable change plan, anticipates barriers to change, and identifies potential support systems. Although most change strategies in this phase (the preparation, action and maintenance stages) are more action-oriented, clients are still more responsive, and ultimately more successful, when the role of continued motivation is not forgotten and they are treated in the empathic, caring style inherent in Motivational Interviewing. For clients in action and maintenance, Motivational Interviewing approaches can help increase self-efficacy and reinforce their accomplishments, both of which are important in sustaining long-term change.

As evidenced by the way researchers and clinicians around the world have embraced the two models, it is apparent that Motivational Interviewing and the Stages of Change are a "natural fit". Recognizing the parallels and potential synergy of these ways of understanding and treating problem behaviors, professionals have used these models in many diverse areas of behavior change to develop client centered, personalized, motivational interventions that are sensitive to the process and processes of change (Connors, Donovan & DiClemente, in press; DiClemente, Marinilli, Sing & Bellino, 2001; Miller, Zweben, DiClemente & Rychtarik, 1992; Prochaska, Velicer, DiClemente, and Rossi, 1993; Velasquez, Gaddy-Maurer, Crouch & DiClemente, in press; Velicer et al., 1993). We describe in some detail how Motivational Interviewing approaches can be linked to each of the stages of change from the Transtheoretical Model.

TAILORING INTERVENTIONS TO CLIENTS' READINESS TO CHANGE

Individuals can come to the attention of health care providers when they are in any one of the stages of change. Sometimes they are there to seek help in negotiating successful passage through the action stage change. At other times they are unwilling to change but are “mandated” to treatment, either by the legal system or by concerned family members, friends and/or employers. Often clients arrive with problems or conditions where there may be multiple behaviors that need changing (Prochaska & DiClemente, 1984; DiClemente, Carbonari & Velasquez, 1992). Drug abusers with psychiatric disorders, diabetics in health care clinics, or drug dependent, cigarette smoking pregnant women are often in different stages of change depending on which behavior is the focus of attention. For example, a patient who arrives for a clinic visit for hypertension may be in one stage of change for stress reduction strategies, another stage for adopting regular exercise, and yet another for adherence to anti-hypertension medication. In each of these situations, the challenge to the clinician is first to understand where the client is in the change cycle and then to offer the appropriate assistance. In this chapter, we describe each stage of change and offer suggestions about overall Motivational Interviewing style and specific motivational techniques that may be appropriate for each particular stage. While the target behavior, the setting, and availability of time will influence the choice of strategies, this chapter offers guidance on how best to integrate the use of Motivational Interviewing and knowledge of the client’s individual stage of readiness to change throughout the entire change process.

FACILITATING CHANGE IN PRECONTEMPLATORS

Precontemplation is the earliest stage of change. People in precontemplation are unaware of problem behavior or they can be unwilling, or discouraged when it comes to changing it. They engage in little activity that could shift their view of problem behavior and can be rather defensive about the targeted problem behavior. Precontemplators are not convinced that the negative aspects of the current or problem behavior outweigh the positive.

In many areas, particularly the addictive behaviors, precontemplators have often been labeled “resistant.” Our challenge, as clinicians, is to learn why our client may be resistant to change and use strategies that diffuse that resistance in a positive way. The stages of change help us think about client resistance as a state that can be influenced. Rather than feeling discouraged when we encounter client resistance, we realize that the client is in an early stage of change, and we try to learn more about his or her reason for being in that state. Through talking to thousands of precontemplators through the years, we have realized that there are many reasons for someone to be in the precontemplation stage. It can be helpful to think about precontemplators’ resistance to change in what can best be summarized as the “four R’s”: reluctance, rebellion, resignation, and rationalization. Each of these patterns of thinking, feeling and reasoning helps keep precontemplators not ready to change. Although most precontemplators utilize a combination of these patterns, we will describe each pattern as a distinct type.

Reluctant precontemplators are those who through lack of knowledge, or perhaps inertia, do not want to consider change. For these clients, the information or the impact of their problem behavior has not become fully conscious. Rather than being actively resistant, they are

actually more passively reluctant to change. It may be that they are fearful of change, or perhaps they are comfortable where they are and don't want to risk the potential discomfort of change. For these clients, careful listening and providing feedback in a sensitive empathic manner can be very helpful. Motivating this type of precontemplator often takes time, as it did with Harvey, a client Dr. DiClemente saw in his practice.

Harvey was a very successful businessman who had been promoted to senior vice president from a direct sales position in an advertising company. However, he found that managing others was much more difficult than doing the job himself, because of his problems in being direct with others. During the evaluation visits, we discussed many issues related to the job, the politics of the company, and her personal limitations. I listened carefully and reflected back to Harvey what I heard her describing about his job situations. Using the Motivational Interviewing strategies of reflective listening, summarizing, and affirmation, I encouraged Harvey to explore his situation. He soon began to see patterns to his behavior. He expressed surprise when he came to the conclusion that he had difficulty being direct when it involved criticism of another. Harvey saw himself as an open, "no-nonsense person." Eventually Harvey chose to resign his management position rather than work on changing his interpersonal style. He was reluctant to change at that particular time. Although I might have been tempted to encourage him to change, I acknowledged that some precontemplators are OK right where they are for the time being. Once the "seeds" have been planted, precontemplators often need time to let them germinate. I also knew that through our sessions Harvey had begun to consider change. I suspected that he would eventually come to his own decision to make a change. One year later, Harvey returned asking for a referral to work on interpersonal issues. It seemed that the job change had relieved the immediate stress, but he had recently entered a romantic relationship where the problems we had discussed became quite apparent. He returned stating, "You know those problems we discussed last year? I am ready to tackle them now."

Sometimes the reluctant client will progress rapidly once he or she verbalizes the reluctance, feels listened to, and begins to feel the tension between the reluctance to change and the possibility of a different future. At other times, the change may take longer, as in Harvey's case. By allowing clients the freedom to make their own decisions, clinicians facilitate a situation where the possibility of change can be explored in a non-threatening manner.

Unlike reluctant precontemplators, *rebellious precontemplators* often have a great deal of knowledge about the problem behavior. In fact, they often have a heavy investment in the behavior. They are also invested in making their own decisions. They do not like being told what to do! The rebellion may be a residue of prolonged adolescence or the result of insecurity and fears. No matter what the source, the rebellious precontemplator will appear hostile and resistant to change. It is easy to recognize a rebellious precontemplator, they often argue with the clinician, demonstrate either verbally or nonverbally that they don't want to be there, and provide a host of reasons that they are not going to change. Motivational Interviewing provides a way of allowing rebellious precontemplators the freedom to express their strong feelings about change while at the same time directing their energy in a positive direction. For example, when a clinician agrees with the rebellious precontemplator that no one can force them to change, and in fact the clinician wouldn't dream of trying, it often diffuses the strength of their argument.

Providing a menu of options seems to be the best strategy for working with the rebellious precontemplator. Encouraging clients to think about the choices available, including small incremental changes instead of complete and abrupt abstinence, for example, often opens the door to the possibility of change. Keep in mind that the rebellious precontemplator has a lot of energy invested in the problem behavior. The real challenge is helping the client shift some of that energy into contemplating change rather than using it to resist or rebel. Once a rebellious precontemplator decides to change, the energy often shifts to a positive energy of determination to succeed.

Lack of energy and investment, on the other hand, is the hallmark of the *resigned precontemplator*. These clients have given up on the possibility of change and seem overwhelmed by the problem. For example, many smoking clients begin by saying how many other attempts they have made to quit. They feel hopelessly addicted to cigarettes and out of control. They see the habit as being in control, not the client. Often these individuals will tell us that the only way to deal with the smoking problem is to stop young people from starting to smoke in the first place. The clear message is that it is too late for them. One recent study examined a variant of resignation called cessation hopelessness in a sample of smokers in the precontemplation stage. Those precontemplators who were high in a measure of cessation hopelessness had levels of temptation to smoke that were very high and exceeded their confidence to abstain by a greater amount than those who were lower on this measure (Daniels, 1998).

Instilling hope and exploring barriers to change are the most productive strategies for these resigned precontemplators. It is important to help these clients see that relapse is common, and not to be viewed as a failure. Many people go through the stages several times before maintaining a change, and each change attempt is a learning opportunity. It is important for all clients to realize that behavior change is difficult but it is not impossible. Often, the key to working with the resigned precontemplator is to build confidence a bit at a time by assisting them in making the decision to begin with a small change and affirming each success they have, however small. Keep in mind that research shows that the clinician's belief in the client's ability to change is a strong predictor of outcome. Success builds upon success, and with each small change the resigned precontemplator builds self-efficacy about making bigger changes.

While the resigned precontemplator often feels that they have none of the answers to their problems, the *rationalizing precontemplator* often appears to have all the answers. These clients are not considering change because they often think they have figured out the odds of personal risk, or believe that their behavior is the result of another's problem, not theirs. It is easy to identify the rationalizing client in a session; it is when the clinician begins to feel as though he or she is in a debate, or a session of "point counterpoint." Although it may feel like rebellion, the resistance of the rationalizing client lies much more in their thinking than in their emotions. For example, smokers who are convinced that they are really not at much risk because they started smoking after 21 years of age; are only smoking 15 cigarettes a day; have only smoked for 10 years; or have a 90 year old grandfather who smokes, are prime examples. The same study that examined cessation hopelessness also evaluated a characteristic labeled "harm minimization"

among precontemplating smokers. Those smokers who had higher scores on the harm minimization scale demonstrated significantly lower levels of cognitive processes of change like consciousness raising and self-reevaluation (Daniels, 1998). Minimizing the harm reduces contemplation activities.

Oftentimes the rationalizing precontemplator will want to discuss their rationale. The problem is that the discussion typically only serves to strengthen their side of the argument! Empathy and reflective listening seem to work best with this type of client. Starting with a decisional balance exercise in which the client is asked to tell the “good things” about the behavior is an ideal strategy for the rationalizing precontemplator. They quickly realize that you are not going to argue with them, and that you will actually acknowledge that they have some compelling reasons for their behavior. Once they have talked about the pros of their behavior, clients are often more open to considering that there are also “not so good” things. The skilled Motivational Interviewing clinician gently reflects both the pros and cons of change and encourages the client to elaborate. Double-sided reflections can be used to reflect any ambivalence about change, and summarizing both sides of the behavior sometimes helps the rationalizing precontemplator to recognize that some of their rationale may be flawed. A note of caution: it can be very tempting to use the decisional balance “cons” as ammunition in which we use the clients own words to remind them of all the negative things about their behavior and argue for change. This defeats the purpose of the exercise. Motivational Interviewing is effective in large part because it avoids argumentation and allows the client to hear and assimilate his or her own “change statements.” Again, it may be best to summarize the decisional balance and then ask where this leaves the client in terms of thinking about the behavior. The clinician who trusts the process and lets clients come to their own conclusions and change in their own time, are often surprised at how frequently this exercise motivates rationalizing precontemplators to re-examine, and change, their behavior.

Before leaving the land of the precontemplator, it is important to mention that there is a myth among clinicians that in dealing with serious health-related, addictive, or other problems, more is always better. We often hear it said that Motivational Interviewing is a good technique to use in some cases, but when a person is really at risk (like a pregnant smoker or a drug addicted client) that more must be done. Clinicians often believe that more education, more intense treatment, or more confrontation will necessarily produce more change. Nowhere is this less true than with precontemplators. More intensity will often produce fewer results with this group (Miller, Benefield & Tonigan, 1993; Heather, Rollnick & Bell, 1993). So it is particularly important to use careful motivational strategies, rather than to mount high-intensity programs or efforts that will be ignored by those uninterested in changing the particular problem behavior. It is just as erroneous, however, to believe that precontemplators don't ever change and there nothing we can do. They can be coaxed, encouraged, informed, and advised. We cannot make precontemplators change, but we can help motivate them to move to contemplation.

CONTEMPLATION: A RISK REWARD ANALYSIS

In the contemplation stage of change, a person acknowledges that he or she has a problem and begins to think seriously about solving it. Contemplators struggle to understand their

problem, to see its causes, and to think about possible solutions. Contemplators, however, may be far from actually making a commitment to action. For example, a contemplator might gather a lot of information about treatment programs but not actually enroll. That is often the nature of contemplation. The individual knows where he or she wants to be and maybe even how to get there, but is not quite ready to make a commitment. Although many contemplators move on to the action stage, it is possible to spend many months or years in contemplation (Carbonari, DiClemente & Sewell, 2000). The clinician's goal when working with a contemplator is to help the client "tip the balance" in favor of change.

Contemplation is often a very paradoxical stage of change. The fact that the client is willing to consider the problem and the possibility of change offers hope for change. Contemplation is the stage when clients are quite open to information about the behavior and exploring decisional balance considerations. It is also the stage where clients experience the most ambivalence. As clinicians, it is important that we be comfortable with and that we recognize ambivalence as a vital part of the contemplation stage of change. We should also realize that contemplation does not mean commitment.

Clinicians often make the mistake of thinking that a person who is contemplating change is ready to make a commitment; this is not the case. A good example of this confusion is in workplace smoking cessation programs. When surveys are taken in the workplace, large numbers of smokers (up to 70 or even 80%) express interest in quitting. So programs are developed and offered. Typically, these programs are very poorly attended and are lucky to attract 3 to 5% of the smokers. Clearly, thinking about quitting does not equal commitment to quit. Most smokers wish to change or wish that they could stop smoking. Many are considering change in the near future. When confronted by a choice to sign up for a specific cessation program on a specific date, however, they find many reasons why right now is not the right time. What are missing in most of these worksite programs are adequate motivational strategies to assist individuals in moving from contemplation to preparation and being ready to take action (DiClemente & Scott, 1997).

Some studies have found a relationship between contemplation and higher levels of depression (Velasquez, Carbonari & DiClemente, 1999). It may be that there is a subgroup of contemplators who are in what DiClemente and Prochaska (1998) have called "chronic contemplation." They think about change, often to the point of rumination, but they don't move beyond the contemplation stage. When working with contemplators, it is important to assess how long the person has been considering change and whether they have made past attempts. The key here is to assist the contemplator in thinking through the risks of the behavior and potential benefits of change and to instill hope that change is possible. It is also important for contemplators to receive accurate information about their behavior and personal feedback about the impact the behavior is having on their lives. Although one piece of information will not make the decision for the individual, this type of personally relevant information or feedback can be extremely persuasive. For example, when we talk with groups of smokers, we try to give accurate information about the facts of smoking (e.g., there are over 1,000 different gases in cigarette smoke; smoking contributes not only to lung cancer, but also to heart disease and chronic obstructive lung disease; tar coats the cilia of the lungs, making them very inefficient in

transferring oxygen). However, information alone is not enough. We also try to make this information personally relevant by asking about their smoker's cough, telling them to breathe out the smoke through a white handkerchief in order to see the residue, or discussing the number of colds or respiratory problems they are having.

Other examples of feedback that can help contemplators resolve ambivalence are “reports” based on client assessment such as those used in the Motivational Enhancement Therapy treatment in Project MATCH (Miller, Zweben, DiClemente & Rychtarik, 1992). These reports detailed information about the client’s level of drinking, a comparison between their drinking levels and those of the American population (gender-specific norms), family risk factors, and other variables. In health care settings, blood test results, pulmonary functioning, or cholesterol levels can provide important feedback to the contemplator. This information, which is visible and personally relevant, is more powerful in shifting the decisional balance toward action than all the scare tactics, general lectures, and nagging in the world (DiClemente, Marinilli, Singh & Bellino, 2001; Kreuter, Strecher & Glassman, 1999).

We discussed above how the decisional balance exercise can be helpful in assisting the precontemplator to talk about the problem behavior. It is also very useful in the contemplation stage. In fact, research shows that for many different behaviors, contemplation is the stage in which evaluations of the pros and cons of the behavior are more or less equal (Prochaska, et al., 1994). The task for the clinician, then, is to help the client move from this balanced state to one that is “tipped” in favor of change. Once this happens, the client is ready to move on to the next stage.

An important strategy with contemplators is to “accentuate the positive.” Often individuals considering changing a problem behavior will concentrate on all the negative aspects of the behavior. “I know how bad my drinking is for me,” they say. In fact, they can often produce a litany of reasons why what they are doing is bad for them. Clinician and client are often baffled by the fact that even with all these negatives, change does not occur. The reality is that if the behavior were not in some way beneficial to the client, he or she would not be doing it. Until a client acknowledges the “good things” about the behavior, they cannot prepare to combat temptation once they make an attempt to change. The decisional balance helps facilitate this process. Once the client has evaluated the benefits of the behavior, they move to focusing on the “not so good things.” The clinician listens for change statements here, which include expressions of concern, problem recognition, intent to change or optimism about change. Offering periodic summaries, using double-sided reflections, and reflecting and affirming self-motivational statements are ways to help the client get the most from the decisional balance exercise.

Careful listening, summarizing, feedback, double-sided reflections, affirmation, and increasing self-efficacy are powerful facilitators of change when working with contemplators. Overcoming the ambivalence and shifting the decisional balance can take time and requires great patience and persistence on the part of the motivational interviewer.

DEVELOPING A PLAN AND PREPARING FOR ACTION

In the Preparation stage, the person is ready to change in the near future. They are on the verge of taking action. People in this stage may have tried and failed to change in the past. Yet, they have often learned valuable lessons from past change attempts. Individuals in this stage of change need to develop a plan that will work for them. Then they need to make firm commitments to follow through on the action option they choose.

The decision to take appropriate steps to stop a problem behavior or to initiate a positive behavior provides access to the preparation stage. Most people in this stage will make a serious attempt at change in the near future. They appear to be ready for and committed to action. The challenge is to help the client develop a change plan that is acceptable, accessible, and effective.

Once clients have committed to action, it would seem to be a simple task to assist them in preparing to move forward. However, commitment to change does not necessarily mean that change is automatic, that change methods used will be efficient, or that the attempt will be successful in the long term. Being prepared for action does not mean that all ambivalence is resolved. In fact, the decision-making process continues throughout the preparation stage.

The first task for the clinician working with the client in preparation is to assess the strength of the client's commitment to change. This is often difficult to assess simply from verbal self-report. Sometimes clients who are adamant about being ready to change are trying to convince themselves as much as they are trying to convince the clinician. For example, Dr. Velasquez recently worked with a woman who was about to be released from a county jail. This client had a history of substance abuse and expressed a strong desire to stay abstinent upon release. She enthusiastically recited all the reasons she was going to change and vowed never to use drugs or alcohol again. Upon discussing the client's plans for change, however, it became clear that she had not given much thought to how she planned to accomplish her goal. In fact, her plans were to return to a relationship with a drug-abusing boyfriend. She had no plans for a job or for filling her free time, and she had not thought about further treatment or how to avoid her substance-abusing friends. In other words, this client said she was ready and determined to make a change, but she lacked the plans for doing so. The task here was to use Motivational Interviewing to assist the client in making a solid realistic assessment of the difficulties she might encounter upon release, a plan for each of these contingencies, and a way to know when she might need additional help.

Using a Motivational Interviewing approach, the clinician helps the client think creatively about how to develop the most effective plan. Considering the client's personal life circumstances and drawing on their past experience with change, the clinician guides the client in developing change strategies. Presenting a menu of possible options from which the client can choose is often helpful. The clinician can also draw on his or her own experience with past clients, gently suggesting strategies that have worked for other people. While respecting the client's choices, the clinician can also gently warn against change plan strategies that seem inappropriate or ineffective. While the clinician's tasks are different in this phase, they are no less challenging. A solid, workable change plan is not easy to develop; it takes careful listening,

reflection, and incisive intervention on the part of the clinician as well as the client's careful thought and determination.

ACTION: IMPLEMENTING THE PLAN

In the action stage of change people most overtly modify their behavior. They stop smoking, remove all the desserts from the house, pour the last beer down the drain, or enter a treatment program. In short, they make the move and implement the plan for which they have been preparing. Action is the most obviously busy period, and the one that requires the greatest commitment of time and energy. Changes made during the action stage are more visible to others than those made during the other stages, and therefore receive the greatest recognition. The danger is that many people, including professional therapists, can erroneously equate action with change, overlooking not only the critical work that prepares people for successful action but the equally important (and often more challenging) efforts to maintain the changes following action.

What do people in action need from a clinician? They have often made a plan and have begun to implement it before we even see them. Often, making an appointment has coincided with other changes they have made. Clients in the action stage have various reasons for consulting a clinician. This might be to make a public commitment to action, to get some external confirmation of the plan, to seek support, to gain greater self-efficacy, or sometimes to create external monitors of their activity. Working with clients in the action stage can be rather easy and quite rewarding for clinicians. In fact, clients at this stage represent many of our "miracle cures" that see us for one session, make significant and long-lasting changes, and tell everyone what great therapists we are! It is important, however, not to assume that once a person has reached the action stage that it is an easy downhill ride. Clients in action may still have some conflicting feelings about the change. They may miss their old lifestyles in some ways and be struggling to fit into this new behavior. Careful listening and affirming clients that they are doing the right thing are important in this stage. It is also important to check with the client to see if they have discovered any parts of their change plans that need revision. Some clients in action will discover their change plans need to be revised, and the clinician can be of assistance in this process. Clients also need affirmation for what they have accomplished and assurance that they can continue to make the desired changes.

No matter how much a person wants to change, and regardless of their willingness to take action, if they do not have adequate self-efficacy, they are not likely to experience long-term success. Motivational Interviewing can help to build clients' self-efficacy as they take action. By focusing on their successful activity, reaffirming their decisions, and helping clients to make intrinsic attributions of success, clinicians can bolster clients' self-efficacy evaluations.

MAINTENANCE, RELAPSE, AND RECYCLING

Maintenance is the final stage in the process of change. Sustaining behavior change can be difficult. In the maintenance stage, the person works to consolidate the gains attained during the action stage and struggles to prevent relapse. Although traditional therapy views maintenance as a static stage, the Transtheoretical Model sees it as a critically important continuation that can last from as little as more than six months to as long as a lifetime. Motivation to consolidate the change is needed. Without a strong commitment to maintenance, there will surely be relapse.

Often change is not completely established even after six months or so of action. This is particularly true if the environment is filled with cues that can trigger the problem behavior. We all know of cases where an individual who has stopped drinking relapses just when everyone thinks the problem is finally resolved. It is important to help individuals in this stage to practice an active and intelligent maintenance of the changes they have made (CSAT TIP #35).

The TTM model recognizes that relapse is possible (even likely) when moving through the stages of change. People often “recycle” through the stages many different times before reaching success; thus, a “slip” should not be considered an utter failure, but rather a step back. Many people progress from contemplation through preparation to action and then maintenance, but many will relapse. Following a relapse, individuals often regress to an earlier stage, and then begin progressing through the stages yet again. Frequently, people who do relapse have a better chance of success during the next cycle. They have often learned new ways to deal with old behaviors, and they now have a history of partial successes to build upon.

Relapse can occur for many different reasons. Individuals may experience a particularly strong, unexpected urge or temptation to return to the problem behavior and fail to cope with it successfully. Sometimes relaxing their guard or testing themselves begins the slide back to the former behavior pattern. Often the complete personal cost of the change is not realized until later, and commitment or self-efficacy erodes. Most often relapse does not occur automatically, but takes place gradually after an initial slip occurs.

During what Saul Shiffman (1982) calls these "relapse crises," clients may turn to a therapist or other health care provider for help. Either they have slipped and are early into relapse, or they are scared and shaken by their desire to go back to smoking or drinking or drugs. They come to the clinician with a weakened self-efficacy and a fear that the old habit may be stronger than they are. They seek reassurance and some way to make sense of the relapse crisis. It is important to help these clients see the crisis as an opportunity to learn rather than a failure. Understanding the cycle of change in a learning context can assist the both the clinician and the client. Effective use of the Motivational Interviewing approach and strategies can help motivate the individual to renew or recommence the journey through the early stages once again, to problem solve the failed plan in order to create a more effective one, and initiate another change attempt.

CURRENT STATUS AND FUTURE CHALLENGES

It should be quite apparent by now that motivational interviewing strategies can be knit together rather seamlessly with the stages of change model. The philosophical underpinnings of Motivational Interviewing are consonant with respect for the client's process of change. Motivational Interviewing assumes, as does the Transtheoretical Model, that change is the responsibility of the individual and occurs in the entire life space of the individual and not simply in the context of any specific intervention. However, identifying a client's status in terms of the stages of change can be very helpful in deciding which motivational strategies to use and when to use them. Motivational Interviewing approaches are appropriate for clients in each of the

stages of change. The content and strategies will vary, but the objective remains the same (CSAT TIP #35; DiClemente, 1999a). Clients often need help to negotiate the passage from one stage to the next in the process of change. The ultimate goal is to help the individual make efficient and effective changes in his or life with the assumption being that these changes will be life enhancing and become reinforcing in their own right. At some point these behaviors will become sustained over time and integrated into his/her lifestyle so that the individual can exit the cycle of change (DiClemente & Prochaska, 1998, DiClemente, In Press). Motivational and other types of interventions punctuate and promote the process of change but that process is always extends well beyond any specific intervention.

Although the change process as delineated in the Transtheoretical Model and Motivational Interviewing approaches are quite compatible and have been integrated, there are continued challenges for understanding and intervening in this process that should be explored. These include understanding how Motivational Interviewing approaches affect specific client processes of change, applicability of the Transtheoretical Model and Motivational Interviewing cross culturally, and the issue of brief versus more extensive interventions.

In addition to the Stages of Change, the TTM has identified a number of processes of change that have been implicated in movement from one stage to the next and in successful change (Carbonari & DiClemente, 2000; DiClemente & Prochaska, 1998; Prochaska & DiClemente, 1984; Prochaska, Velicer, DiClemente, Guadagnoli & Rossi, 1991). Cognitive and experiential processes of change appear more important in the earlier stages of change and behavioral processes more important in the later stages (Perz, DiClemente & Carbonari, 1996). It is assumed that Motivational Interviewing approaches influence cognitive and experiential processes like consciousness raising, self-reevaluation, environmental reevaluation and the like with clients in early stages of change. On the other hand, as clients move forward in the process, Motivational Interviewing influences efficacy and the behavioral processes of change. These assumptions need to be explored (Joseph, Breslin & Skinner, 1999). The data from Project MATCH indicate that Motivational Enhancement Therapy (Miller, Zweben, DiClemente, & Rychtarik, 1992) was as effective as more extensive treatments for the most part (Project MATCH, 1997). However, an analysis of the process of change indicated that this treatment did not have a differential effect on process activity compared to other treatments (DiClemente, Carbonari, Zweben, Morell & Lee, in press). It may be too difficult to capture processes of change and critical transitions in large-scale treatment trials. Experimental trials are needed to examine specifically how various Motivational Interviewing strategies and approaches affect the different processes of change identified in the Transtheoretical Model.

The stages of change have been examined with a number of different behaviors and in a variety of populations in various countries around the world. Motivational interviewing has also been translated into different languages transported into cultures beyond the confines of the U.S., Great Britain, and Australia where it was developed. Initial data and reports of application from various parts of the world support the contention that the same basic process of change occurs cross culturally. Contemplation, preparation, action and maintenance tasks appear to present similar challenges in addiction treatment, for example, in both western and eastern cultures. If this is true, the challenge is to understand how to facilitate movement through the stages among

various ethnically and culturally diverse populations (Suris, Trapp, DiClemente & Cousins, 1998). It is clear that the types of considerations, value systems, action strategies, and support systems differ in diverse populations as individuals move from one stage to another. This may mean that the structure of the process of change remains the same but the content of decisional considerations, the nature of commitment, and the specific strategies in action and maintenance plans would differ. The challenges lie in measuring the stages of change (Carey, Purnine, Maisto & Carey, 1999) and in understanding which strategies of the motivational interviewing approach can be used cross culturally to promote stage transitions and which need significant adaptation by practitioners in the different cultures in order to be sensitive to the needs of the practitioners and the clients.

Finally, motivational strategies have most often been used in the context of brief or briefer interventions. The process of change as conceptualized in the Transtheoretical Model can take a significant amount of time, even years, for an individual to change one single target behavior. When multiple behaviors in various areas of life functioning are involved, the task becomes more complicated (DiClemente, 1994; 1999b; DiClemente & Prochaska, 1998). How should motivational approaches and strategies be synchronized with the process of change? Are additional types of strategies (cognitive/behavioral interventions) needed in addition to the Motivational Interviewing intervention for some clients or some types of problems? Some clinical approaches are beginning to use a Motivational intervention first and then to switch to a more intensive cognitive/behavioral intervention as is being evaluated in a large clinical trial of alcoholism treatment called Project COMBINE. Other programs are using motivational enhancement as a pretreatment before using more intensive approaches. Other approaches have integrated stages into more traditional treatments (Connors, Donovan & DiClemente, in press) or combined Motivational Interviewing approaches and processes of change-based strategies into group therapy sessions (Velasquez et al., in press). How to integrate Motivational Interviewing strategies with more intensive interventions and whether this combination of approaches is needed for any or all clients are questions that demand additional research.

Although there are continuing questions and challenges related to understanding the interplay between the Transtheoretical Model and Motivational Interviewing, one thing is clear. Health and addiction researchers and clinicians have seen both of these perspectives as helpful. Many have begun to use the Transtheoretical Model to broaden their view of the process of change and to extend the scope of potential interventions from precontemplation to maintenance issues. At the same time they have adopted motivational approaches to intervention to address the critical issue of motivation that most often had been left completely in the domain of the client. Only understanding more fully and intervening more effectively in the process of change will realize the promise of the Transtheoretical Model and Motivational Interviewing.

REFERENCES

- Carbonari, J.P. and DiClemente, C.C. (2000). Using Transtheoretical Model Profiles to Differentiate Levels of Alcohol Abstinence Success. Journal of Consulting and Clinical Psychology 68, (5), 810-817.
- Carbonari, J.P., DiClemente, C.C., Sewell, K.B. (1999) Stage transitions and the transtheoretical “stages of change” model of smoking cessation. Swiss Journal of Psychology, 58(2), 134-144.
- Carey, K.B., Purnine, M.M., Maisto, S.A., & Carey, M.P. (1999) Assessing Readiness to change Substance Abuse: A critical review of instruments. Clinical Psychology: Science & Practice, 6, 245-266.
- Carney, M. M., & Kivlahan, D. R. (1995). Motivational subtypes among veterans seeking substance abuse treatment: Profiles based on stages of change. Psychology of Addictive Behaviors, 9, 1135-1142.
- Connors, G., Donovan, D., & DiClemente, CC. (in press) Clinician’s Guide to Treatment of Alcohol and Drug Problems. Guilford Press.
- CSAT Treatment Improvement Protocol Number 35. (1999) Enhancing Motivation for Change in Substance Abuse Treatment. DHHS Publication No. (SMA) 99-3354.
- DiClemente, C.C. (1994). If behaviors change, can personality be far behind. In T. Heatherton & J. Weinberger (Eds.), Can Personality Change (pp. 175-198). Washington, D.C.: American Psychological Association
- DiClemente, C.C. (1999a) Motivation for Change: Implications for Substance Abuse. Psychological Science 10 (3), 209-213.
- DiClemente, C.C. (1999b) Prevention and harm reduction for chemical dependency: A process perspective. Clinical Psychology Review, Special issue: prevention of children’s behavioral and mental health problems: New horizons for psychology, 19(4), 473-486.
- DiClemente, C.C. (In Press?) Addiction and Change: A Transtheoretical Analysis. Guilford Press.
- DiClemente, C. C., Carbonari, J. P., & Velasquez, M. M. (1992). Alcoholism treatment mismatching from a process of change perspective. In R. R. Watson (Ed.), Treatment of Drug and Alcohol Abuse (pp. 115-142). Totowa, NJ: Humana Press.
- DiClemente, C.C.; Carbonari, J.; Zweben, A.; Morrel, T.; and Lee., R.E. Motivation hypothesis causal chain analysis. In: Longabaugh, R. and Wirtz, P.W., eds. Project MATCH: A Priori

Matching Hypotheses, Results, and Mediating Mechanisms. National Institute on Alcohol Abuse and Alcoholism Project MATCH Monograph Series, Volume 8. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism, in press.

DiClemente, C. C., & Hughes, S. O. (1990). Stages of change profiles in alcoholism treatment. Journal of Substance Abuse, 2, 217-235.

DiClemente, C.C., Marinilli, A. S., Singh, M., Bellino, L.E. (2001) The role of feedback in the process of health behavior change. American Journal of Health Behavior, 25, 217-227.

DiClemente, C.D., Story, M. Murray, K. (2000). On a Roll: The Process of Initiation and Cessation of Problem Gambling Among Adolescents, Journal of Gambling Studies, Vol. 16, (2/3).

DiClemente, C.C. & Prochaska, J.O. (1985) Processes and Stages of Change: Coping and competence in smoking behavior change. In S. Shiffman and T.A. Wills (Eds.), Coping and Substance Abuse (pp. 319-342) New York: Academic Press.

DiClemente, C.C. and Prochaska, J.O. (1998) Toward a comprehensive, Transtheoretical model of change: Stages of change and addictive behaviors. In: Miller, W. R. and Heather, N., eds. Treating Addictive Behaviors. 2nd edition. New York: Plenum.

DiClemente, C.C. and Scott, C.W. Stages of change: Interaction with treatment compliance and involvement. In: Onken, L.S., Blaine, J.D., and Boren, J.J., eds. Beyond the Therapeutic Alliance: Keeping the Drug-dependent Individual in Treatment. Rockville, MD: National Institute on Drug Abuse, 1997.

Glanz, K., Patterson, R.E., Kristal, A.R., DiClemente, C.C., Heimendinger, J., Linnan, L., & Ockene, J. (1994). Stages of change in adopting healthy diets: Fat, fiber and correlates of nutrient intake. Health Education Quarterly, 21 (4), 499-519.

Grimley, D. M., Riley, G. E., Bellis, J. M., & Prochaska, J. O. (1993, December). Assessing the stages of change and decision-making for contraceptive use for the prevention of pregnancy, sexually transmitted diseases, and Acquired Immunodeficiency Syndrome. Health Education Quarterly, 20 (4), 455-470.

Heather, N., Rollnick, S., & Bell, A. (1993). Predictive validity of the Readiness to Change Questionnaire, Addiction, 88, 1667-1677.

Isenhart, C. (1994). Motivational subtypes in an inpatient sample of substance abuser. Addictive Behaviors, 19, 463-475.

Joseph, J., Breslin, C. & Skinner, H. (1999) Critical perspectives on the Transtheoretical Model and Stages of Change. In JA Tucker, DM Donovan & GA Marlatt (Eds.) Changing Addictive Behavior: Bridging Clinical and Public Health Strategies. New York: Guilford.

- Kreuter, MW, Strecher, VJ, Glassman, B. One size does not fit all: The case for tailoring print materials. *Annals of Behavioral Medicine* 1999; 21 (4): 276-283.
- Marcus, B. H., Rossi, J. S., Selby, V. C., Niaura, R. S., & Abrams, D. B. (1992). The stages and processes of exercise adoption and maintenance in a worksite sample. *Health Psychology*, 11(6), 386-395.
- Miller, W.R., Benefield, R.G., & Tonigan, J.S. (1993) Enhancing motivation for change in problem drinking: A controlled comparison of two therapist styles. *Journal of Consulting and Clinical Psychology* 61(3), 455-461
- Miller, W. R., & Rollnick, S. (1991). Motivational interviewing: Preparing people to change addictive behavior. New York: Guilford Press.
- Miller, W.R., Zweben, A., DiClemente, C.C. & Rychtarik, R., (1992) Motivational Enhancement Therapy Manual: A clinical research guide for therapists treating individuals with alcohol abuse and dependence. [Monograph] Project MATCH NIAAA.
- Perz, C. A., DiClemente, C. C., & Carbonari, J. P. (1996). Doing the Right Thing at the Right Time? Interaction of Stages and Processes of Change in Successful Smoking Cessation. *Health Psychology*, 15, 462-468.
- Prochaska, J.O. & DiClemente, C.C. (1983) Stages and Processes of Self-Change of Smoking: Toward an Integrative Model of Change. *Journal of Consulting and Clinical Psychology*, 51, 390-395.
- Prochaska, J. O., & DiClemente, C. C. (1984). The Transtheoretical approach: Crossing the traditional boundaries of therapy. Malabar, FL: Krieger.
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to the addictive behaviors. *American Psychologist*, 47, 1102-1114.
- Prochaska, J. O., DiClemente, C. C., Velicer, W. F., & Rossi, J. S. (1993). Standardized individualized, interactive and personalized self-help programs for smoking cessation. *Health Psychology*, 12, 399-405.
- Prochaska, J.O., Velicer, W.F., DiClemente, C.C. Guadagnoli, J.O., & Rossi, J.S., (1991). Patterns of Change: Dynamic Typology applied to smoking cessation. *Multivariate Behavioral Research*, 26, 83-107.
- Prochaska, J. O., Velicer, W. F., Rossi, J. S., Goldstein, M. G., Marcus, B. H., Rakowski, W., Fiore, C., Harlow, L. L., Redding, C. A., Rosenbloom, D., Rossi, S. R. (1994). Stages of change and decisional balance for twelve problem behaviors. *Health Psychology*, 13(1), 39-46.

- Project MATCH Research Group. (1997). Matching Alcoholism treatments to Client Heterogeneity: Project MATCH Post-treatment Drinking Outcomes. Journal of Studies on Alcohol, 58,(1), 7-29.
- Rollnick, S. Mason, P., Butler, C. (1999) Health Behavior Change. London: Churchill Livingstone.
- Shaffer, H. J. (1992). The Psychology of stage change: The transition from addiction to recovery. In: Lowison, J. H., Ruiz, P., Millman, R. B., & Langrod, J. G., eds. Substance Abuse: A Comprehensive Textbook, 2nd ed., Baltimore, MD: Williams & Wilkins.
- Shiffman, S. (1982) Relapse following smoking cessation: A situational analysis. Journal of Consulting and Clinical Psychology, 50, 71-86.
- Simpson, D.D., & Joe, G.W. (1993). Motivation as a predictor of early dropout from drug abuse treatment. Psychotherapy, 30, 357-368.
- Suris, A.M., Trapp, M.C., DiClemente, C.C., & Cousins, J. (1998) Application of the transtheoretical model of behavior change for obesity in Mexican American women. Addictive Behaviors, 23(4), 655-668.
- Velasquez, M.M., Carbonari, J.P., DiClemente, C.C. (1999) Psychiatric severity and behavior change in alcoholism: the relation of Transtheoretical model variables to psychiatric distress in dually diagnosed patients. Addictive Behaviors, 24(4), 481-496
- Velasquez, M.M., Gaddy-Maurer, G., Crouch, C. & DiClemente, C.C. (In press). *Changing Substance use: a Stages of Change Manual for Treating Substance Abuse*. New York: Guilford Press.
- Walker-Daniels, J. (1998) Coping with the health threat of smoking: An analysis of the precontemplation stage of smoking cessation. Doctoral Dissertation. Psychology Department. University of Maryland, Baltimore County.
- Velicer, W. F., Prochaska, J. O., Bellis, J. M., DiClemente, C. C., Rossi, J. S., Fava, J. L., & Steiger, J. H. (1993). An expert system intervention for smoking cessation. Addictive Behaviors, 18, 269-290.
- Weinstein, N. D., Rothman, A. J. & Sutton, S. R. (1998). Stage theories in health behavior: Conceptual and methodological issues. Health Psychology 17 (3), 290-299.
- Werch, C. E. & DiClemente, C. C. (1994). A multi-component stage model for matching drug prevention strategies and messages to youth stage of use. Health Education Research: Theory and Practice.

Willoughby, R.W., & Edens, J.F. (1996). Construct validity and predictive utility of the stages of change scale for alcoholics. *Journal of Substance Abuse*, 8(3), 275-291.