CHALLENGES OF

LEARNING AND PRACTICING

MOTIVATIONAL INTERVIEWING

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To the memory of my grandmothers Vendla och Teresia

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ABSTRACT

Background: The past three decades have seen a growth in health promotion research and practice, stimulated by the epidemiologic transition of the leading causes of death from infectious to chronic diseases. An estimated 50% of mortality from the 10 leading causes of death is due to behaviour, which suggests individuals can make important contributions to their own health by adopting some health-related behaviours and avoiding others. Motivational interviewing (MI) has emerged as a brief counselling approach for behavioural modification that builds on a patient empowerment perspective by supporting self-esteem and self-efficacy. MI has become increasingly popular in a variety of health care settings as well as non-health care settings.

Aims: The overall aim of this thesis is to contribute to improved understanding of the different factors that impact on the learning and practice of MI. The aim of study I was to identify barriers and facilitators to use MI with overweight and obese children in child welfare and school health services. The aim of study II was to identify barriers, facilitators and modifiers to use MI with pharmacy clients in community pharmacies.

Methods: Participants in study I were five child welfare centre nurses from the county council and six municipally-employed school health service nurses, all from Östergötland, Sweden. Participants in study II were 15 community pharmacy pharmacists in Östergötland Sweden. Data for both studies were obtained through focus group interviews with the participants, using interview guides containing open-ended questions related to the aims of the studies. Study II also included five individual interviews. Interview data were interpreted from a phenomenological perspective.

Results: In study I, important barriers were nurses' lack of recognition that overweight and obesity among children constitutes a health problem, problem ambivalence among nurses who felt that children's weight might be a problem although there was no immediate motivation to do anything, and parents who the nurses believed were unmotivated to deal with their children's weight

problem. Facilitators included nurses' recognition of the advantages of MI, parents who were cooperative and aware of the health problem, and working with obese children rather than those who were overweight. In study II, pharmacists who had previously participated in education that included elements similar to MI felt this facilitated their use of MI. The opportunity to decide on appropriate clients and/or health-related behaviours for counselling was also an important facilitator. The pharmacists believed the physical environment of the pharmacies was favourable for MI use, but they experienced time limitations when there were many clients on the premises. They also experienced many difficulties associated with the practical application of MI, including initiating and concluding client conversations.

Conclusions: Learning and practicing MI effectively is difficult for many practitioners as it requires a new way of thinking and acting. Practitioners' use of MI is not effective unless there is recognition that there is an important health-related problem to be solved. Practitioners feel more confident using MI with clients who have health-compromising behaviours and/or risks in which the practitioners feel they have expertise. Possessing considerable MI counselling skills does not compensate for insufficient knowledge about a targeted health-related behaviour and/or risk. Feedback from clients plays an important role for the quality and quantity of practitioners' MI use.

Key words: children, counselling, health promotion, motivational interviewing, nurse, overweight, pharmacist.

LIST OF PAPERS

This thesis is based on the following papers, which are referred to in the text by their Roman numerals I and II:

PAPER I

Lindhe Söderlund, L., Nordqvist, C., Angbratt, M., & Nilsen, P. (2008). Applying motivational interviewing to counselling overweight and obese children. *Health Education Research* (in press) doi:10.1093/her/cyn039.

PAPER II

Lindhe Söderlund, L., & Nilsen, P. (2008). Feasibility of using motivational interviewing in a Swedish pharmacy setting. *International Journal of Pharmacy Practice* (in press).

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1. INTRODUCTION

The past three decades have seen a growth in health promotion research and practice. This interest has been stimulated by the epidemiologic transition of the leading causes of death from infectious to chronic diseases in higher-income areas of the world; the ageing of the population in the West; escalating health care costs; and research findings linking individual health-related behaviours such as physical inactivity, poor dietary habits, tobacco use, and alcohol consumption to increased risk of morbidity and mortality (Tones & Green, 2004). An estimated 50% of mortality from the 10 leading causes of death is due to behaviour, which suggests individuals can make important contributions to their own health by adopting some health-related behaviours and avoiding others (Conner & Norman, 2005).

Despite the increased interest and activity in health promotion, the health care system has been remarkably slow to integrate perspectives of patient empowerment and involvement in health care (Dumlen & Bensing, 2002). However, motivational interviewing (MI) has emerged as a brief counselling approach for behavioural modification that builds on a patient empowerment perspective by supporting self-esteem and self-efficacy (Miller, 2004). MI was originally developed for use with patients who suffered from addictions, but has been applied to populations affected by a broad range of behavioural issues, including alcohol, nicotine, physical activity, HIV risk behaviour, diabetic care, and obesity (Emmons & Rollnick, 2001; Miller, 2004; Rubak, Sandbaek, Lauritzen, & Christensen, 2005; Van Wormer & Boucher, 2004).

MI has been shown to produce significant changes in client health-related behaviours in general and in substance use in particular (Miller, Yahne, Moyers, Martinez, & Pirritano, 2004). This technique has become increasingly popular in a variety of health care settings as well as non-health care settings such as correctional institutions and schools. It has been used by psychologists, physicians, nurses, midwives, and social workers (Wahab, 2005). Many practitioners have found this method to be more effective than trying to persuade clients of the benefits of and need to change (Rubak *et al.,* 2005).

2. MOTIVATIONAL INTERVIEWING

2.1. A BRIEF HISTORY OF MI

The original concept of MI grew out of a series of discussions held between a visiting scholar and a group of Norwegian post-graduate psychologists at the Hjellestad Clinic near Bergen in Norway in 1982. American psychologist William R. Miller had taken a sabbatical and spent three months at the clinic. He met the group psychologists and they discussed how Miller would respond to difficult situations they had encountered when treating people with alcohol problems. "As I explained and demonstrated how I counselled alcoholics, they asked wonderful probing questions about why I said what I did, what I was thinking, and why I pursued one line and not another," Miller would later explain (Miller, 1995, p. 3). "They coaxed from me a specification of what I was doing and why. I wrote this down in a somewhat long and rambling manuscript, which I shared with a few colleagues".

For Miller, the questions posed by curious colleagues provoked self-exploration that led to his writing a manuscript that outlined the ideas behind MI. Miller did not intend to publish the paper but sent it to a few colleagues for comment. One of them was Dr Ray Hodgson, who was then editor for the *British Journal of Behavioural Psychotherapy*. "Clearly the whole manuscript was too long for publication but I contacted Bill and asked if he would like to consider publishing the bones of the paper in our journal", Hodgson remembered. "I was delighted when he agreed and we decided to put him on the fast track since the ideas were so important to behavioural psychotherapy and, as it turned out, to the therapeutic community at large" (Moyers, 2004, p. 294).

Miller's manuscript, "Motivational Interviewing with Problem Drinkers" was published in the *British Journal of Behavioural Psychotherapy* in 1983. In the article, Miller described MI as a common sense, pragmatic approach based on principles derived from effective counselling practice and experience. He conceptualized motivation not as a personality trait but as part of the process of change in which contemplation and preparation are important early steps

that can be influenced by the counsellor. Another key point was that confrontation in counselling tended to elicit denial and avoidance of further discussion. Miller's article generated a great deal of interest from the research world, prompting explorations of the style of counselling he described. Researchers committed to investigate the claims made in the paper.

The next developmental leap for MI occurred in 1989, when Miller, on a sabbatical at the National Drug and Alcohol Research Centre in Sydney, Australia, met the British psychologist Stephen Rollnick, who was coordinating a research programme. "We quickly became friends," Miller later recalled (Miller, 1995, p. 3). "I was quite surprised to hear from Steve how influential motivational interviewing had become in Britain. It was becoming standard practice in the addictions field there, which I expect was due in no small part to Steve's own extensive training efforts. I had no idea that this was so." Rollnick encouraged Miller to write more about the implementation of MI. "I told him in no uncertain terms how potentially valuable this method had become. I was very blunt with him, I told him – 'You ought to write about it a bit, so people can use it, because it could make a real contribution'" (Moyers, 2004, p. 295). The meeting with Rollnick prompted Miller to become more serious about describing and explaining elements of MI in greater detail. The two of them collaborated on the first book on MI, *Motivational Interviewing: Preparing People to Change Addictive Behavior*, which was published in 1991. The book included a description of the first principles of MI.

Research and practitioner interest in MI grew steadily during the 1990s. Requests for training and evaluation soon outstripped Miller and Rollnick's abilities to respond. They realized that there was a need for a pool of qualified MI trainers and decided that training teachers of MI in workshops would be the best way to promote appropriate use of the approach (Moyers, 2004). To this end, they formed Training New Trainers (TNT) and organized the first training conference in 1993 in Albuquerque, New Mexico, USA. In 1995, the Motivational Interviewing Network of Trainers (MINT) was established. This is a network comprised of those who had completed TNT training and wanted a network to exchange ideas for research and training (MINT, 2008). The first international meeting for MI trainers was held in Malta in 1997. These meetings have since alternated between Europe and America. The MINT network has grown each year, enrolling an influential group of clinicians, teachers, and researchers. Recent years have seen a proliferation of MI training

resources, including textbooks, manuals, training video tapes, a supervision manual, and websites (Martino, Ball, Nich, Frankforter, & Carroll, 2008).

During the 1990s, MI was increasingly used in various health care settings other than those dedicated to the treatment of addictions. This development led to the publication of a second book on MI in 1999, *Health Behavior Change – A Guide for Practitioners*, written by Rollnick, Mason, and Butler (1999). The book was geared towards MI work by general health care professionals. In 2002, a second, thoroughly revised edition of *Motivational Interviewing – Preparing People for Change* was published. Miller and Rollnick delayed publishing it until they felt they had a substantial body of evidence to support the efficacy and effectiveness of the approach (Moyers, 2004). The book further developed the definition and principles of MI. The first part was translated into Swedish in 2003, and was the first book on MI in Swedish.

Since then, further books have been published; *Motivational Interviewing in the Treatment of Psychological Problems* by Arkowitz, Westra, Miller, and Rollnick is the first book that has applied MI to mental health issues. The first world conference on MI was held in 2008 in Interlaken, Switzerland, attracting 222 participants from 25 countries. Hence, 25 years after Miller's original article, MI research and practice show no signs of slowing down, instead continuing to expand and following a steep diffusion curve.

2.2. WHAT IS MI?

2.2.1. Definitions and general characteristics

MI was developed in part as a reaction to patient and provider dissatisfaction with the prescriptive nature of many addiction treatment approaches. Treatment at the time typically involved overt, aggressive confrontation, often in group and family settings, particularly in the United States, where 12-step approaches were dominant (Sellman, MacEwan, Deering, & Adamson, 2007). Confrontational therapies say that therapists should challenge people with the strongest negative effects of their current situation, in order to emphasize the threat. The resultant fear is thought to be the energizer of the change process. Another approach, rational-emotive therapy, involves confronting clients with

their "irrational cognitions", as defined by the therapist, and pressuring the client to change them (Miller, 1983). Commenting on such approaches, Miller believed that fear-inducing or pressuring communications can immobilize the individual, making the possibility of change more remote (Miller, Benefield, & Tonigan, 1993).

Although MI was first described in 1983, it was not until 1995 that Miller and Rollnick provided the first explicit definition of MI. They described MI as a directive, client-centred counselling style for eliciting behaviour change by helping clients to explore and resolve ambivalence (Rollnick & Miller, 1995). Miller and Rollnick revised this definition slightly in 2002, now defining MI as "a client-centred, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence" (Miller & Rollnick, 2002, p. 25). The MI definition was further revised in late 2008, when MI was described as "a person-centred method of guiding to elicit and strengthen personal motivation for change" (first announced by Miller on a MINT discussion forum in late December 2008 ahead of an article which was in press in *Behavioural and Cognitive Psychotherapy*; Miller & Rollnick, in press).

MI assumes that most people hold conflicting motivations for change and often vacillate in their degree of motivation and ambivalence (Arkowitz & Miller, 2008). MI allows clients to openly express their ambivalence in order to guide them to a satisfactory resolution of their conflicting motivations, with the aim of facilitating desired behavioural changes (Rollnick & Miller, 1995).

It is not the MI counsellor's function to directly persuade or coerce the client to change. Attempting to directly persuade a client to change will be ineffective because it entails taking one side of the conflict which the client is already experiencing. The result is that the client may adopt the opposite stance, arguing against the need for change, thereby resulting in increased resistance and a reduction in the likelihood of change (Miller & Rollnick, 1991). Hence, an important objective of MI is to increase a client's intrinsic motivation to change, which arises from personal goals and values. This approach emphasizes helping a client to make his or her own decision to change, rather than the client being pressured from external sources such as others' attempts to persuade or coerce the person to change (Arkowitz & Miller, 2008).

Clients must bear the responsibility of deciding for themselves whether or not to change and how best to go about it. The intention is to transfer the responsibility for arguing for change by clients by eliciting what is termed "change talk" (originally referred to as "self-motivating statements"), i.e. overt declarations by clients that demonstrate recognition of the need for change, concern for their current position, intention to change, or the belief that change is possible (Miller & Rollnick, 2002). There is a good relationship between what people say they will achieve and what they actually achieve (Raistrick, 2007). The counsellor's role in the process is to help clients clarify their motivations for change; provide information and support; and offer alternative perspectives on the present problem behaviours and potential methods for changing these behaviours (Miller & Rollnick, 2002).

There are typically two phases of MI sessions. The client is often ambivalent about change in the first phase and may be insufficiently motivated to accomplish change. Hence, the aim of this phase is to resolve the client's ambivalence and facilitate increased intrinsic motivation to change. The client showing signs of readiness to change signals the start of the second phase. This may be manifested by talk or questions about change and descriptions that suggest that the client is envisioning a future when the desired changes have been made. The focus in the second phase shifts to strengthening the commitment to change and supporting the client to develop and implement a plan to achieve the changes (Arkowitz & Miller, 2008).

MI is a relatively brief intervention, typically delivered within one to four sessions. However, there is no "pure" MI, as many studies have described modified MI approaches (Burke, Arkowiz, & Mechola, 2003). MI can be delivered as a freestanding intervention or as part of other treatments (Hettema, Steele, & Miller, 2005). MI is often combined with other approaches such as cognitive-behavioural therapies.

2.2.2. *The spirit of MI*

Rollnick, Miller, & Butler (2008) have defined the so-called MI spirit in terms of three key characteristics:

- collaborative

- evocative
- honouring client autonomy

The MI spirit can be seen as the style or intention of the counsellor's disposition with the client. The spirit provides the foundation for the skills (also referred to as methods or techniques) of MI practice. While the skills of MI can be taught, the MI spirit is more elusive and comes from within the practitioners. The spirit of MI involves an ability and willingness to be with a client enough to glimpse their inner world (Wahab, 2005).

According to Rollnick *et al.* (2008), MI assumes a collaborative partnership between the client and the practitioner. MI addresses a situation in which client behaviour change is needed, thus having a more specific goal than the client-centred method, which is a broad approach to the consultation. MI involves an active collaborative conversation and joint decision-making process between the practitioner and the client (Rollnick *et al.,* 2008).

Rollnick *et al.* (2008) posit that MI practitioners seek to activate clients' own motivation and resources for change instead of "giving" them what they might lack, e.g. medication or information. This involves connecting behaviour change with a client's values and concerns. This requires an understanding of the client's own perspective, by evoking the client's own arguments and reasons for change (Rollnick *et al.,* 2008).

Rollick *et al.* (2008) argue that a certain degree of clinical detachment from outcomes is required when practicing MI. This detachment is not an absence of caring, but rather it is an acceptance that clients can make choices that may not result in the desired health improvements. It is important to recognize that the practitioner may inform or advise, yet it is ultimately the client who decides what to do. Recognizing and honouring the client's autonomy is an important element in facilitating behaviour change (Rollnick *et al.,* 2008).

2.2.3. The principles of MI

MI consists of four principles which underpin its skills (Miller and Rollnick, 2002):

- expression of empathy
- development of discrepancy
- rolling with resistance
- supporting client self-efficacy

The expression of empathy by a counsellor is a fundamental and defining feature of MI (Miller & Rollnick, 1991). It is assumed that behaviour change is only possible when the client feels personally accepted and valued. The counsellor empathy is seen as crucial for providing the conditions necessary for a successful exploration of change to take place (Miller & Rollnick, 2002).

Developing discrepancy involves exploring the pros and cons of the client's current behaviours and of changes to current behaviours, within a supportive and accepting atmosphere, in order to generate or intensify an awareness of the discrepancy between the client's current behaviours and his or her broader goals and values. Developing discrepancy elicits movement toward consistency between the clients' behaviours and their core values (Miller & Rollnick, 2002).

Avoidance of arguing with a client about his or her need for change, i.e. "rolling with resistance", is seen as critical in MI. It is proposed that direct confrontations about change will provoke reactance in clients and a tendency to exhibit greater resistance, which will further reduce the likelihood of change. Clients may actively dispute the need for change, but the aim in MI is not to try to subdue clients and render them passive recipients of a counsellor's point of view through force of argument. Instead, the MI counsellor should reframe statements and invite clients to consider new information and perspectives (Miller & Rollnick, 2002).

Support for clients' self-efficacy in change is important because even if clients are motivated to modify their behaviours, change will not occur unless clients believe that they have the resources and capabilities to overcome barriers and successfully implement new ways of behaving. The MI counsellor supports self-efficacy by helping clients believe in themselves and become confident that they can carry out the changes they have chosen (Miller & Rollnick, 2002).

2.2.4. MI skills

Five foundational MI skills (also known as techniques or methods) that are consistent with the principles and spirit of MI have been described by Miller and Rollnick (2002):

- asking open-ended questions
- reflective listening
- affirmations
- summarizing
- eliciting change talk

Open-ended questions are used to allow clients to do most of the talking in MI counselling sessions. Reflective listening from practitioners helps clients verbalize and make their meanings more explicit. This is necessary because people do not always express their thoughts clearly due to concerns or they are simply not able to find the proper words to convey their experience. Open-ended questions help clients gain better access to their true feelings and thoughts, so that they can better be recognized (Arkowitz & Miller, 2008).

An MI counsellor should frequently affirm the client in the form of statements of appreciation or understanding in order to encourage and support the client during the change process. Summary statements are used to link and draw together the material that has been discussed, showing that the counsellor has been listening. Summaries are particularly useful to collect and reinforce change talk. Eliciting change talk is important to provide the client with a way out of their ambivalence (Miller & Rollnick, 2002). Change talk consists of statements reflecting desire, perceived ability, need, readiness, reasons or commitment to change (Arkowitz & Miller, 2008).

2.3. THEORETICAL INFLUENCES CONTRIBUTING TOWARD THE DEVELOPMENT OF MI

There is no satisfactory explanation as to *how* and *why* MI can be effective. MI was not derived from theory, but rather arose from specification of principles underlying intuitive clinical practice (Hettema *et al.*, 2005). MI has been

criticized for essentially lacking a theoretical base (Draycott & Dabbs, 1998). Indeed, Miller and Rollnick (2002) have acknowledged that so far little attention has been paid to developing a theoretical underpinning to MI. However, while MI lacks a coherent theoretical framework, there are many theoretical influences contributing toward the development of MI.

2.3.1. Rogers' client-centred counselling

The basis for the empathic counselling style of MI can be found in Carl Rogers' school of therapy, variously known as client- or person-centred therapy. First described in 1957, Rogers developed principles of reflective listening and believed that significant learning is only possible when the individual has confidence in his learning ability. The main agent of change in this approach was the therapist rather than a specific treatment method (Rogers, 1959). In essence, Rogers described what is now called a therapeutic relationship (Raistrick, 2007). However, MI differs from the traditional Rogerian approach in that it is also intentionally directive in seeking to move a client toward change by selectively eliciting and strengthening the client's own reasons for change (Miller & Rollnick, 1991).

2.3.2. Cognitive Dissonance Theory

MI's principle of developing discrepancy between a client's behaviours and their core values was first couched within the framework of Leon Festinger's Cognitive Dissonance Theory (Festinger, 1957). Cognitive dissonance occurs when an individual experiences some degree of discomfort resulting from an incompatibility between two cognitions or between a belief and a behaviour. The theory suggests that this conflict will cause an uncomfortable psychological tension, leading people to change their beliefs to fit their behaviour instead of changing behaviours to fit beliefs, as conventionally assumed. Dissonance theory applies to all situations involving attitude formation and change. It is especially relevant to decision-making and problem-solving (Aronson, Fried, & Stone, 1991; Cooper, 2007).

2.3.3. Theory of Psychological Reactance

The MI principle of avoidance of arguing for change, i.e. "rolling with resistance", is influenced by the Theory of Psychological Reactance, first proposed by J.W. Brehm in 1966. The theory holds that a threat to, or loss of a freedom, motivates the individual to restore (or maintain) that freedom. When people perceive an unfair restriction on their actions a state of reactance is activated. Reactance is an intense motivational state. A person with reactance is emotional, single-minded, and somewhat irrational.

The theory associates reactance with emotional stress, anxiety, resistance and struggle for the individual, and assumes that people are motivated to escape from these feelings. The motivational qualities of reactance are so strong that the person feels impelled to take action. People with reactance will try to get unfair restrictions removed or they will try to subvert restrictions (Brehm, 1966). The theory has received considerable attention within the field of mental health, where it has been widely tested. Reactance has been shown to play a useful role in boosting the efficacy of psychotherapy and in dealing with client resistance (Dowd, 1993; Fogarty, 1997).

2.3.4. Bandura's self-efficacy concept

The MI principle of supporting clients' self-efficacy draws on Albert Bandura's Social Learning Theory, first described in 1977. Self-efficacy is the belief that one is capable of performing in a certain manner to attain certain goals. An important principle of Social Learning Theory is that self-efficacy is more strongly learned, and mastery of the new behaviour more durable, when an individual is an active participant in behaviour change (Bandura, 1977).

The self-efficacy concept is also part of Bandura's Social Cognitive Theory, first explained in 1986. The theory proposes that behaviour is determined by incentives and expectancies. It predicts that behaviours are changed when a person perceives control over the outcome, encounters few external barriers, and feels confidence in one's own ability, i.e. self-efficacy (Bandura, 1986). High self-efficacy has been shown to be an important predictor of behaviour change (Armitage & Conner, 2000).

2.3.5. Stages of Change model

MI has been closely aligned with James O. Prochaska and Carlo C. DiClemente's Stages of Change model, first described in 1983 (Prochaska & DiClemente, 1983). In fact, Miller made reference to the model in his original paper on MI that same year. There are obvious similarities between MI and the Stages of Change model, although they were developed independently (Arkowitz & Miller, 2008).

The Stages of Change model posits that individuals progress through five distinct stages while undergoing behavioural changes: pre-contemplation (no intention to change the behaviour in the foreseeable future; contemplation (consider making a change in the next six months); preparation (preparing to make a change); action (actively engaged in making a change); and maintenance (the change has been maintained for six months). While all individuals are held to move through these changes, it is assumed that the rate of progression will vary dramatically between individuals and behaviours (Armitage & Conner, 2000). The model gives helpful guidance in understanding the tasks that need to be accomplished for motivational and behavioural change (Raistrick, 2007).

Miller has described MI and the Stages of Change concepts as "kissing cousins" (Miller, 2008). They have shared characteristics, including the approach to motivation as a process of change and the view of ambivalence as an integral part of the change process (Tober & Raistrick, 2007). However, MI is primarily concerned with the early stages of change, by resolving ambivalence for enhanced motivation in the direction of action (Arkowitz & Miller, 2008).

2.3.6 Self-Determination Theory

More recently, Self-Determination Theory has been proposed as a theoretical rationale for an improved general understanding of how MI works (Markland, Ryan, Tobin, & Rollnick, 2005; Vansteenkiste & Sheldon, 2006). Self-Determination Theory is a theory of personality development and self-motivated behaviour change and maintenance that has been under development since the 1970s, with particularly important contributions by Edward L. Deci and Richard M. Ryan. It assumes that people have a natural

tendency to be curious about the world and are innately motivated to explore it, and to better themselves and right themselves when something is wrong. The theory proposes that all behaviours can be described as lying along a continuum of relative autonomy (or self-determination), reflecting the extent to which a person endorses and is committed to what he or she is doing. Self-Determination Theory focuses on autonomy support as a crucial determinant of optimal motivation and positive outcomes. Autonomy is the need to perceive oneself as the source of one's behaviour (Deci & Ryan, 2002). Autonomy support, then, is the practitioner's support of independence in the client.

Three components of autonomy support have been differentiated: the person in authority (counsellor, teacher, parent, etc.) should acknowledge the perspective of the person being motivated; there should be as much choice as possible within the limits of the context; and there should be a meaningful rationale in those instances where choice cannot be provided (Deci, Eghrari, Patrick, & Leone, 1994). It has been suggested that many MI principles and skills are consistent with this concept of autonomy support, including reflective listening and summarizing, which help increase the client's self-awareness, thus facilitating making more autonomous choices (Vansteenkiste & Sheldon, 2006). It has been shown that clients who experience autonomy-supportive counsellors benefit most from treatment (Williams, 2002; Sheldon, Joiner, Petit, & Williams, 2003).

2.4. THE EVIDENCE BASE OF MI

The efficacy and effectiveness (the terms are often used interchangeably in studies) of MI in achieving behavioural changes have been examined in a large number of randomized controlled trials (RCT) concerning behavioural changes published since the late 1990s. These studies have been conducted in various settings and for a number of health-related behaviours, including alcohol, drugs, diet, exercise, and smoking. The largest body of literature concerns the use of MI to address alcohol abuse and dependence, which was the original purpose of the approach (Miller, 2004).

The cumulative evidence regarding the efficacy and effectiveness of MI concerning behavioural changes has been documented in eight systematic

reviews and five meta-analyses of MI study data. These have covered a total of 72 different RCTs. Two of the systematic reviews and meta-analyses, Burke *et al.* (2003) and Rubak *et al.* (2005), have particular relevance to this thesis since they covered all RCTs that had been conducted at that time (further RCTs have been conducted since then although no new systematic reviews have been published).

The 2003 meta-analysis/systematic review by Burke *et al.* (2003) encompassed 30 RCTs of MI efficacy. A meta-analysis is a technique for quantitatively integrating findings from multiple studies on a given topic (Polit & Beck, 2006). Burke *et al.* noted that few of the MI studies could be described as being "pure MI", as they modified the method in some way, and hence should be considered adaptations of MI. However, all of the studies included in the analysis incorporated the four basic principles of MI (expressing empathy, developing discrepancy, rolling with resistance, and supporting client self-efficacy). The meta-analysis showed that MI interventions were equivalent to other active treatments in terms of comparative efficacy and superior to no treatment or placebo controls for problems involving alcohol, drugs, diet, and exercise. However, there was no support for the efficacy of the interventions in the areas of smoking cessation and HIV-risk behaviours (Burke *et al.*, 2003).

The meta-analysis/systematic review by Rubak *et al.* (2005) included data from 72 RCTs. Nearly two-thirds (64%) of the studies in which MI was used for counselling lasting 15 minutes or less were effective in changing behaviour. The meta-analysis demonstrated significant effects for MI for reducing body mass index, total blood cholesterol, systolic blood pressure, blood alcohol concentration, and standard ethanol content However, MI approaches were not significantly effective for reducing smoking or for reducing blood glucose. (Rubak *et al.*, 2005).

Suarez and Mullins (2008) published the first systematic review which investigated the effects of MI with regard to health behaviour change in paediatric populations (age 18 years and younger). Their study covered nine RCTs specific to health-related MI interventions, including diabetes, healthy eating, dental care, increased contraceptive use among adolescents and reduced second-hand smoking (studies concerning substance use behaviours and treatments were excluded). The authors concluded that MI appeared to be feasible for a wide range of paediatric issues. However, they regarded the evidence for its efficacy to be "preliminary". Furthermore, the breadth of

behavioural domains in which there was proven effect for paediatric populations was considered limited.

2.5. IMPLEMENTATION OF MI

MI has diffused very rapidly in the past two decades, with an ever-growing number of studies since Miller's first article was published in 1983 (figure 1). Several hundred publications are now available. The large research interest in MI has been paralleled by widespread implementation, i.e. actual usage in practice. MI was first employed in the addiction field before spreading to various health care and health promotion fields. More recently, MI has expanded into schools and correctional systems (Arkowitz & Miller, 2008).

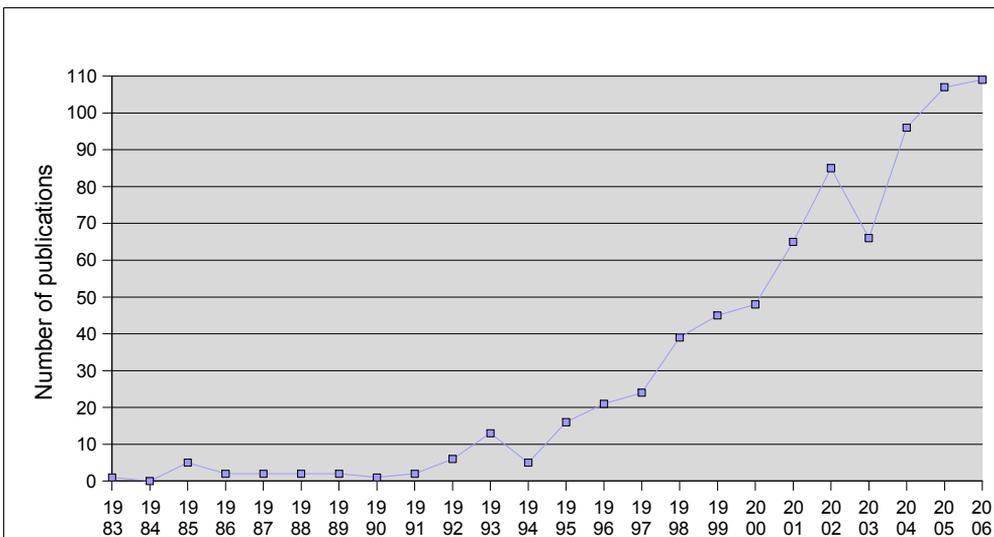**Figure 1: Publications on MI between 1983 and 2006. Source: Data reported by MINT Library Bibliography (2008).**

In Sweden, the use of MI has been actively supported by several state agencies and advocated in various governmental initiatives. The Swedish National Institute of Public Health, which is a state agency under the Ministry of Health and Social Affairs, has encouraged the use of MI for counselling on smoking,

alcohol, and physical activity by providing financial support for MI training for health care professionals and by housing a website with manuals and interactive training programmes (Swedish Institute of Public Health, 2008).

The Swedish National Food Administration has promoted the use of an MI in an action plan for healthier dietary habits and increased physical activity in maternity, child, dental, primary, secondary, and school health care services (National Food Administration, 2005). A Swedish government bill "A renewed public health policy" advocates the use of MI in the field of physical activity, smoking cessation and alcohol (Government Bill, 2007). Furthermore, the state-owned pharmacy chain, Apoteket AB, has promoted the use of MI. In addition, the Swedish correctional system has implemented an adaption of MI (Farbring & Johnson, 2008). The foundation of the Motivational Interviewing Coding (MIC) Lab in 2005 represents another step towards implementation of MI in Sweden. This lab has been established at the Department of Clinical Neuroscience, Division of Addiction Research, Karolinska Institute, Sweden, as a resource for coding MI counsellor behaviour in taped MI sessions. The lab can be used as part of MI training efforts or provide a quality control function of MI use (Forsberg, Källmén, Hermansson, Berman, & Helgason, 2007).

Multiple factors contribute to the diffusion of MI, both in Sweden and around the world. While the scientific evidence base for the approach is growing, the primary appeal of MI may be its wide application in many different behavioural domains and client populations. MI is also compatible with many different treatment approaches, which permits its integration into many clinical practices (Baer, Kivlahan, & Donovan, 1999; Carroll *et al.*, 2002; Steinberg *et al.*, 2002). A further appeal is that MI is a brief intervention, which is important for its use in the many settings where time is highly restricted (Rubak *et al.*, 2005). The use of MI usually results in at least modest success within relatively few sessions (Burke *et al.*, 2003; Hettema *et al.*, 2005). It has also been noted that health care professionals find MI intuitively appealing because they tend to view the MI principles and skills as consistent with how they work, i.e. they consider themselves as highly empathic, reflective, and collaborative with clients (Ball *et al.*, 2002).

2.6. INCORPORATING MI IN CLINICAL PRACTICE

Miller and Moyers (2006) have described eight stages for becoming competent in the clinical use of MI: (1) becoming familiar with the underlying philosophy of MI (collaboration, evocation, and autonomy); (2) acquiring basic MI skills to become proficient in the ability to use open questions, affirm the client's responses, apply accurate reflections and provide summaries when necessary; (3) recognizing and reinforcing change talk; (4) eliciting and strengthening change talk; (5) rolling with resistance to avoid confrontations and argumentation; (6) developing a plan, which may be initiated by the client and counsellor asking "what next?"; (7) helping the client to commit to the change plan; and (8) ability to switch between MI and other intervention styles.

Most MI training for clinicians is provided in the form of workshops lasting 1–3 days. Such workshops typically include an introduction to the philosophy and principles of MI, demonstration of the method, and guided practice in learning the skills (Bennett, Hayley, Vaughan, Gibbins, & Rouse, 2007). Several measures for monitoring and assessment of MI skills have been developed including the Yale Adherence and Competence Scale (YACS); the Motivational Skill Code (MISC); the Motivational Interviewing Process Code (MIPC); the Motivational Treatment Integrity Scale (MITI); and the Motivational Interviewing Supervision and Training Scale (MISTS). Most of these measures have been constructed for use in training or supervision, to ensure that practitioners adhere to the basic practices of MI (Madson & Campbell, 2006).

Workshops lasting 1–3 days have been shown to result in some immediate gains in MI proficiency in participants, such as improvements in attendees' knowledge, attitudes, and confidence in working with clients (Baer *et al.*, 2004; Miller & Mount, 2001; Miller *et al.*, 2004; Rubel, Sobell, & Miller, 2000). However, research also suggests that it may be difficult to suppress prior counselling habits, including practices that may be inconsistent with MI. Hence, learning MI involves at least two processes, adding preferred behaviours and suppressing non-preferred behaviours (Miller & Mount, 2001). A common finding is that participants self-report larger increases in MI skills than what is reflected in observational measures (Miller & Mount, 2001). However, these gains have not been shown to endure over time and, hence, may have limited impact on client outcomes (Martino, Carroll, & Ball, 2007). Systematic post-training support, supervision or training appear to be

necessary for long-term adoption of skills (Martino *et al.*, 2008; Miller *et al.*, 2004; Sholomskas *et al.*, 2005; Walters, Matson, Baer, & Ziedonis, 2005).

While MI trials have generally supported the efficacy/effectiveness of MI, most studies on clinicians adopting MI have lacked verification to ensure that MI was in fact delivered as intended (Brown & Miller, 1993; Burke *et al.*, 2003; Handmaker, Hester, & Delaney, 1999). An increasing concern reported in several studies is the quality of MI counselling, as counsellors tend to adapt MI to their own style and practices (Madson, Campbell, Barrett, Brondino, & Melchert, 2005; Moyers & Martin, 2003). Insufficient fidelity to the MI spirit, principles, and skills may be due to difficulties associated with learning and practicing MI since it is not a simple counselling approach to master (Miller & Mount, 2001; Tober & Raistrick, 2007). Rollnick and colleagues (including Miller) have argued for adopting a lifelong learning approach to MI, arguing that MI should be thought of as "a complex clinical skill that is developed and refined over the course of one's career, much like learning to play chess or golf or the piano" (Rollnick *et al.*, 2008, p. 177).

Rollnick *et al.* (2008) have increasingly emphasized that learning of MI in workshops needs to be supported by learning through everyday practice. They believe that improved MI competence requires some sort of feedback on the actual counselling, for example by working with someone who is more skilful at MI who can provide expert coaching. Learning has been defined as changes in an individual's competence, including knowledge, attitudes, skills, and confidence (Ellström, 1992). Informal learning in the course of daily life is increasingly seen as an important dimension of the development of competence (Skule, 2004; Svensson, Ellström, & Åberg, 2004). Informal learning occurs when learning processes are incidental to everyday activity in the workplace (and elsewhere), e.g. by learning from other people and the challenge of the work itself, whereas formal learning involves engagement in tasks structured by a teacher in educational settings. The two types of learning are interrelated and complement each other (Malcolm, Hodkinson, & Colley, 2003).

3. AIMS

The overall aim of this thesis is to contribute to improved understanding of the different factors that impact on the learning and practice of MI. This aim is addressed by investigating factors that influence how MI is applied by nurses in child welfare and school health services when counselling overweight and obese children, and by pharmacists in community pharmacies in conversations with pharmacy clients.

- The aim of study I was to identify the barriers and facilitators to use of MI with overweight and obese children in child welfare and school health services.

- The aim of study II was to identify barriers, facilitators and modifiers to use of MI with pharmacy clients in community pharmacies.

Facilitators were those factors that positively affected the quantity and/or quality of MI use, whereas barriers impacted negatively on the quantity and/or quality of MI use. Modifiers acted in a dual sense, either increasing or decreasing the quantity and/or quality of the use of MI.

4. MATERIALS

4.1. STUDY PARTICIPANTS

In study I, the participants were five child welfare centre nurses from the county council and six municipally-employed school health service nurses, all from Östergötland, Sweden.

In study II, the participants were 15 community pharmacy pharmacists in Östergötland Sweden. Interviews were also conducted with a project leader from Apoteket AB and managers from the two pharmacies from which the pharmacists came (the managers also worked as pharmacists).

4.2. MI TRAINING

The five child welfare centre nurses and six school health service nurses in study I were trained for 2 days in MI. The basic content of the training was as follows: what is motivation?; asking open questions; reflective listening; affirmation; summarizing; eliciting change talk; respond to change talk; permission to give advice; responding to resistance; working with ambivalence; and using agenda charts (Miller & Rollnick, 2002).

An agenda chart was developed (Stott, Rollnick, Rees, & Pill, 1995) for the MI counselling in study I, presenting a menu of health behaviour options based on good eating habits and physical activity (Rollnick *et al.*, 1999) to guide the discussion and help with priority-setting. An "importance ruler" was used to determine the perceived importance of behaviour change to the client and a "confidence ruler" assessed how confident the client was to make the change (Rollnick *et al.*, 1999). These rulers were presented to the parents for their assessment of the importance of and their confidence in the child's weight reduction.

A manual based on Rollnick *et al.* (2002) was assembled in study I for the nurses' practice in MI. It contained guidelines on the following counselling aspects: establishing interest in the child's weight after the weight check-up; encouraging the parents to describe their knowledge about obesity, overweight, and behaviour change; provision of clear, non-judgemental information which the client is given an opportunity to absorb and reflect upon; introduction of the agenda chart; building motivation for change by using the readiness and confidence rulers.

In study II, a project team was formed consisting of an MI trainer from the County Council of Östergötland (first author of the study), a project leader from Apoteket AB, and two "pilot pharmacists" from two community pharmacies in Östergötland County, Sweden. The MI trainer held a 2-day workshop for the three other project team members. The training consisted of the following elements: what is motivation?; the philosophy of MI, asking open questions; reflective listening; affirmation; summarizing; eliciting and responding to change talk; asking permission to give advice; responding to resistance and working with ambivalence. Training was based on descriptions in Rollnick *et al.* (1999) and Miller and Rollnick (2002).

The pilot pharmacists and the MI trainer in study II then assembled a two-sided pocket-sized card to adapt MI for use in pharmacy settings. The card included pointers on how to open up communication about lifestyle issues with certain client groups, e.g. smokers and people with high blood pressure or high lipids. The card also included examples of questions to encourage clients to talk about their desired health and behaviour changes. There were also examples of selected skills such as open-ended questions, summaries, and assessment of clients' importance attached to behavioural changes, and client confidence in making these changes. The back cover of the card showed an importance and confidence ruler to be used with clients, as described by Rollnick *et al.* (1999).

4.3. MI PRACTICE

The nurses in study I practiced MI for 6 months in their routine work following the 2-day training. They counselled overweight and obese children aged 5 and 7 years in health controls. The children were usually accompanied

by one or two parents. The nurses attended four follow-up sessions during this 6-month period to discuss problems that they had encountered in their counselling practice and to receive feedback on how to handle difficult counselling situations.

In study II, following the initial project team training, the MI trainer and the project leader from Apoteket AB introduced the MI project at the two community pharmacies where the pilot pharmacists were recruited. All 15 pharmacists at the two pharmacies were invited to participate in two 2-hour (a total of 4 hours) MI training sessions using material from the assembled card. All agreed and took part in the two sessions. The pharmacists then began using MI at the two pharmacies. One pilot pharmacist at each pharmacy worked side by side with the other pharmacists at the counters, applying MI with clients and providing informal feedback on their colleagues' use of MI as a means of improving their MI skills and their overall client communication. The pharmacists were also offered hands-on training from the pilot pharmacists with whom they could also discuss any difficulties they encountered when practicing MI.

A formative evaluation in study II was conducted shortly after the second of the two training sessions for the pharmacists. This involved the pharmacists answering some questions, with the aim of assessing their initial experiences of using MI. The questions focused on the clients that the pharmacists had communicated with, including the lifestyles under discussion, and the pharmacists' confidence in carrying out the counselling. Based on the responses from this assessment, the MI trainer supervised the pharmacists in small groups in their MI use for approximately 2 hours with the intention of achieving improved MI skills through direct feedback on their practice.

4.4. ETHICAL CONSIDERATIONS

Study I was approved by the Ethics Committee of Linköping University. The nurses in the study received a letter explaining that the interview would be recorded on tape and that their confidentiality would be respected. Everyone agreed to participate although one person was unable to attend the interview due to illness.

4. MATERIALS

In study II, all respondents were sent a letter with information about the interview a few weeks prior to the interviews. The respondents were offered confidentiality. Ethics Committee approval was not required in study II because there was no research conducted on clients. The pharmacists gave mutual consent before the interviews.

5. METHODS

5.1. RESEARCH METHODOLOGY

A research project is built on the foundation of its questions and aims and the method follows from the research questions and aims (Punch, 1998). A qualitative research methodology is appropriate for exploring the full nature of little understood phenomena. Exploratory qualitative research is designed to shed light on the various ways in which a phenomenon is manifested and on the underlying processes contributing to its development (Polit & Beck, 2008, p. 21). Qualitative research forms the backbone of the studies described in this thesis.

Qualitative research does not seek to quantify or enumerate; it does not measure. Generally, it deals with words rather than numbers. It tries to interpret social phenomena in terms of the meanings people bring to them. It studies people in their natural settings rather than in experimental ones. The goal of most qualitative studies is to develop a rich understanding of a phenomenon as it exists in the real world and as it is constructed by individuals in the context of the world (Polit & Beck, 2008).

Data were obtained for both studies through interviews. Interviews are a well-established research technique in qualitative research. The qualitative research interviews attempt to understand the world from the subjects' point of view (Kvale & Brinkmann, 2009). Interviewing was considered an effective strategy to obtain new knowledge about and insights into using MI with overweight and obese children and about using MI in community pharmacies.

Both studies used semi-structured interviews. This type of interview has a loose structure, consisting of open-ended questions that define the area to be explored (Britten, 2006). The research team wanted to be sure that specific topics of interest were covered in their interviews (Beck & Polit, 2008), and used a prepared interview guide to help direct questions. The interviewer's function was to encourage participants to talk freely about all the topics on the list and for participants to tell stories in their own words.

Both studies used focus groups. This approach has been well described and is extensively used in health care research to investigate concepts, ideas or professional responses to changing methods. Focus group interviews are useful for exploring people's opinions, views, and attitudes regarding a certain topic in an interactive setting (Kvale & Brinkmann, 2009). In group settings, issues are explored through interaction among the participants, rather than between the interviewer and the participants, which leads to greater emphasis on the participants' points of view (Morgan, 1988). The interpersonal processes in focus group interviews can help people to explore and clarify their views in ways that would be less easily accessible in one-to-one interviews Focus groups are well suited for exploratory studies in a new domain, such as the studies in this thesis, since the collective interaction may bring forth more spontaneous views than would individual interviews (Kvale & Brinkman, 2009).

In addition to focus group interviews, study II also included five individual interviews, with the aim of achieving a better understanding of all aspects of the project by obtaining information from key informants who had been involved with the project from the outset. This was a strategy to yield the fullest possible understanding of the phenomenon of interest.

5.2. DATA COLLECTION

In study I, an interview guide was prepared for the interviews, containing a number of open-ended questions concerning the nurses' experiences with applying MI to counselling overweight and obese children. Topics of interest were generated by the research team with reference to the existing literature and to the aim of the study. Focus group interviews were conducted with the 10 nurses. There were two focus groups, with five nurses in each.

Similarly, an interview guide was constructed for use in study II consisting of a number of themes and corresponding open-ended questions related to the aim of the study. Focus group interviews were conducted with the 15 pharmacists from the two pharmacies. There were two focus groups at the first pharmacy (with six and four respondents, respectively) and one focus group at the second pharmacy (with five respondents). In addition, five individual interviews were conducted with the Apoteket AB project leader, the two pilot

pharmacists, and managers from the two pharmacies (who also worked with clients in the pharmacies and used MI themselves).

5.3. DATA ANALYSIS

The analysis of the interviews in both studies was carried out in multiple steps. First, the researcher who conducted the interviews read the transcriptions while listening to the audio recordings of the interviews, making corrections as needed. The text was then coded line-by-line for substantive content. In study I, data were categorized with the purpose of identifying the nurses' perceived barriers and facilitators in applying MI with overweight and obese children. In study II, factors were identified as facilitators, barriers and modifiers to the pharmacists' use of MI. Data were interpreted from a phenomenological perspective, with the intention of being true to the participants' descriptions of their life-world and as free as possible from preconceived assumptions.

Phenomenology is rooted in a philosophical tradition developed by Husserl around 1900, and further developed by Heidegger. It is concerned with the lived experiences of humans. In focusing the interview on experienced meanings of the subject's life-world, phenomenology is relevant for clarifying the mode of understanding in a qualitative interview (Kvale & Brinkman, 2009; Polit & Beck, 2008).

In the interpretation of the findings in both studies, quotes were selected on the basis that they were succinct examples of consensual views. No attention was paid to which person in an interview made a certain comment. The research team then discussed the findings among themselves. Finally, for increased trustworthiness, the results were verbally presented to all focus group participants in subsequent meetings. Participants then provided feedback on the results during subsequent discussions in smaller groups. This input verified the results and no further revisions were needed.

5.4. REASEARCHERS´ PREUNDERSTANDING

The researcher's views and understanding are subjective and influence how results emerge from studies and how results are presented. It is therefore important for researchers to account for their opinions and biases (Polit & Beck, 2006). I, Lena Lindhe Söderlund, would like to make the following statements about my own views of the research.

"I am a behavioural scientist and have worked in different fields for about 30 years in community social welfare centres, county councils and rehabilitation centres. My basic clinical work has been conducted in the alcohol field, in which I have been involved in both secondary and tertiary prevention. I have worked with different professions, although primarily with nurses and physicians."

"I experienced my first MI education in 1997, delivered by Professor Stephen Rollnick. Since then I have practised MI in my own clinical work. Since 2002, I have been an MI trainer and a member of the Motivational Interviewing Network of Trainers (MINT). I have trained different health care professionals, perhaps most notably nurses who work with lifestyle issues (blood pressure, diabetes, and obesity). I have also worked extensively with social workers. In addition, I have worked with public health administration for about 7 years."

"I trained the participants in both studies. The focus group and individual interviews in both studies were conducted by interview specialists (Cecilia Nordqvist in study I and Marlene Ockander in study II) who had limited knowledge of MI. I was not present at any of the interviews. We argued that my presence could have introduced considerable bias with the interviewees telling me what they thought I wanted to hear."

There is some debate over whether an insider is a better interviewer than an outsider. An insider shares special knowledge with the interviewees and might have insight into matters obscure to others. On the other hand, it has been argued that unprejudiced knowledge is only accessible to outsiders. However, it has also been claimed that outsiders are no less likely to be free of prejudices, but will just possess different prejudices. The insider must guard against taking things for granted and not probing for details (Kvale & Brinkmann, 2009).

6. RESULTS

6.1. STUDY I

6.1.1. Facilitators

Recognition by the nurses of the advantages of the MI technique and their embracing of its spirit was a critical factor facilitating the use of MI to counsel overweight and obese children. Hence, despite the barriers found in using this approach, nurses believed that MI was a potentially efficient problem solver because it is particularly useful for addressing sensitive topics such as overweight and obesity. For example, one nurse said that "it is a relief to be able to ask the question using this method, 'Do you want to tell me more?' You get a 'yes' or 'no' and then you can save a great amount of work if they do not want you to." Another nurse stated that "earlier we informed and informed and listened, and informed again, but now we try to encourage the patient to re-think instead." MI was considered particularly beneficial for dealing with serious health problems such as anorexia. "It is better with this method when there are sensitive problems. The responsibility rests on the person's shoulders to reflect and to put their thoughts into words instead of following your pointers and suggestions. They have to understand that they are responsible for their own lives, and then this is the [most appropriate] method."

Another important factor that facilitated the application of MI by nurses was the participation of cooperative and knowledgeable children and parents who recognized the problem of overweight or obesity. One nurse simply concluded that "if you have a motivated parent it is much easier to have an MI with the child." Nurses believed that most children and parents have considerable knowledge concerning food. "Often they [parents and children] know a lot and have some solutions if you ask them, if you can refrain from starting to provide advice," one nurse said. Another nurse observed, "I am surprised that kids in the first grade know so much about food and sweets, even about soft

drinks. They say they know that this is not good for their health, yet they eat it! You might think that young children do not reflect on such things, but they really do."

Finally, nurses believed that working with obese children, rather than those who are merely overweight, helped the application of MI counselling. This was because parents of obese children recognized the significance of their children's health problems due to overweight to a larger extent and appeared to be more willing to find solutions and accept help. The following example illustrates this facilitator: "Parents who bring already obese children are somehow already prepared that we will bring it up and often anticipate this, and bring it up themselves."

6.1.2. Barriers

Some statements about childhood obesity made by nurses were categorized under problem denial, i.e. there was a lack of recognition among some nurses that overweight and obesity among children constitutes a real problem. Nurses argued that these children would naturally "grow out of it" and would not remain overweight, and thus did not consider using MI because they did not view the children's weight as a significant problem. Illustrating this barrier, one nurse believed that they "have too weak ground to be able to discuss this, because many of them will grow and lose weight." Another nurse described the children as "healthy fat children," implying that MI counselling or other interventions were not necessary.

A similar barrier to applying MI in counselling children was problem ambivalence among nurses, who had a feeling that children's weight *might* be a problem and that something *ought* to be done about it although they felt no immediate motivation to do anything. Nurses seemingly accepted that today's children weigh more than they did in the past, a development which has led to an increased tolerance for overweight children. For example, one nurse said it was only natural with "a little flesh on the body," which meant that she did "not think of it as obesity or overweight; you accept that they are rounder around the stomach area." Because the rates of overweight and obesity have increased, nurses said that they hesitated to bring up weight issues unless a child was clearly obese. Contributing to the nurses' ambivalence about the

problem was their impression that experts have not agreed on definitions of overweight. One nurse contrasted this with smoking, an issue on which society communicates a unified message.

Parents' problem denial and ambivalence hindered nurses' application of MI to counselling overweight and obese children. Parents who were obviously overweight or obese, yet considered themselves perfectly healthy and fit, argued that their children too were "big but healthy," and hence not in need of any weight counselling. Nurses overwhelmingly viewed overweight and obesity as a family problem. "Really, you should start with the parents," stated one nurse. "You should teach them [the parents] to eat better and then, I think, the children will follow suit, when you influence the parent to eat in the right way and to develop the right habits." However, if parents were not convinced that their child's weight was a problem, nurses felt it was difficult to apply MI counselling with the child and parents.

Still another barrier arose when the nurses perceived that the parents lacked the willingness or motivation to deal with the children's weight problem even though they were aware of the problem. Nurses complained that many parents seemed to pay lip service to their information, but did not really consider making any changes. The following example illustrates this barrier, "Sometimes the patient can be sitting there and saying 'yes, hmm, yes' and then you think that the patient understands, but they really haven't." Some parents did not want to assume responsibility, instead blaming their child. In contrast, some parents were overly protective of their child and did not want to discuss weight issues in the presence of the child for fear of inducing feelings of guilt or shame.

6.2. STUDY II

6.2.1. Facilitators

Pharmacists who had participated in continuing professional or other education that included elements of the MI method, e.g. asking open questions, viewed this as an advantage as it made it easier for them to learn

and use MI: "We've had other training, [such as] customer communication and medication problems. They are quite similar and overlap. That has strengthened us."

The opportunity to choose appropriate clients and/or health-related behaviours for MI counselling was viewed as a facilitator: "You choose those [customers] who are easy to talk with, or if they begin to talk or if you notice that it's easy to talk with them." Diabetes was cited as a suitable subject: "[If the person is] a type-II diabetic, then you don't have to wait for the patient to bring something up. Instead you can ask if the doctor has asked if there is something she can do herself." Smoking was also considered a health-related behaviour that lent itself to MI counselling: "You're very happy if it's a customer who wants to quit smoking because then I feel safe and have a lot of ideas and there won't be any problems." Pharmacists did not want to address certain health-related behaviours. Sex was deemed a particularly sensitive topic: "It's difficult to broach the subject and I don't feel I have anything to do with it [i.e. the customer's sex life]." Concern about addressing alcohol was also expressed: "The difficulties in advising on alcohol issues would be greater than advising on smoking, which we have worked with previously."

Pharmacists believed that the pharmacy setting was a natural environment for MI counselling, with adequate space to talk with clients. They felt that the pharmacy lay-out made counselling less dramatic than conventional health care settings: "It's a very good atmosphere for having a conversation at this pharmacy." Clients turned to the pharmacy when they could not get an appointment for regular health care: "They are referred to us when they call the health care. We have more to offer today, including many products that can be self-administered."

6.2.2. Modifiers

The use of MI required the pharmacists to adopt a somewhat new professional role, which entailed relinquishing the expert role in favour of being more of a coach or partner to the client. This factor functioned as a modifier. Some pharmacists saw it as a positive challenge that influenced their learning and practice of MI positively: "This [using MI] is close to us, it belongs to a lot of what we do. It feels like you can be more helpful since it works the same way

as in health care." Another pharmacist observed: "It's relevant these times that we should become better communicators at pharmacies. I think the customer views us as better advisers if we adhere to this method [MI] than if we don't." Other pharmacists expressed uncertainty about the new role: "The traditional way of doing things was to tell people what to do. Now you have to make them think and decide what they want to do. That's a hell of a difference." One pharmacist provided a historical explanation for difficulties in adjusting to the new role: "For many years, our profession was a craft. We mixed medicine based on the recipes we received. It was a deadly sin to inform because then you disturbed the relation between the patient and the doctor. This project has shown me a brand new professional role and that's why it takes so long for us to change the behaviour."

The use of the importance and confidence rulers functioned as a modifier for the pharmacists' use of MI. Some pharmacists felt the ruler provided a structure for conversations that made their MI counselling easier: "You must learn to use the manual. It's not that advanced. And when you master it there are no problems at all. It doesn't require all that much training, although it does take time to get good at it." However, the importance and confidence ruler was also seen as being somewhat unnatural to use, thus inhibiting the MI counselling: "It was awkward to present the manual [with the importance and confidence ruler presented on the back cover] and say, 'Can you see this scale?' It felt unnatural."

Feedback from clients was also a modifier, encouraging or discouraging MI use depending on client reaction. It facilitated pharmacists' MI use when the feedback they received from clients was positive: "Some customers are very grateful that we care. They shake your hand and ask if they can come back." However, negative client feedback posed an obstacle for further MI use: "One of the customers told me to shut up, because [he felt] everybody was nagging and nagging."

6.2.3. Barriers

Pharmacists felt it was difficult to initiate MI counselling and engage in conversation with many clients: "It's particularly the beginning that's difficult, especially with a customer who doesn't say that much." Concluding the counselling was also found to be difficult as pharmacists felt it contrasted with

the normal procedure of giving advice and then confirming that a client has understood the message: "The wrap-up is also difficult, to just get a conversation going isn't that satisfactory." Another pharmacist opined that: "The conclusion is difficult if you have a customer who doesn't speak much, unless you're satisfied with having planted a seed. But that doesn't feel so satisfactory. On the other hand, maybe you don't need more for it to be a motivational conversation."

Pharmacists mentioned that long queues and crowded premises often restricted the time that was available for MI. Conversations had to be very brief and/or were frequently interrupted: "The time aspect is important and how much you have to do at the pharmacy. That has influenced the whole thing. Being short of time is difficult when you're going to change your behaviour." Another pharmacist simply concluded that: "The number of customers we have determines everything."

The implementation of MI was a top-down decision that did not involve the pharmacists who were going to learn and use the method. This created some animosity among some pharmacists and acted as a barrier to their use of MI: "I think it depends a lot on how you start the project, that you feel you have a choice. You need to feel that it's fun and that it's something you *want* to do. I think that determines how it turns out."

A strained organizational climate constituted another barrier to the learning and use of MI by the pharmacists. There had been staff cut-backs in both settings and the pharmacists were experiencing a heavy work load, which impacted negatively on their motivation to learn and use MI: "[There has been] a lack of understanding from the employer. It doesn't work with a smaller staff, and it's important that they [the employer] understand the impact of that. Sometimes you don't think they know what kind of work we're doing."

7. DISCUSSION

7.1. GENERAL FINDINGS

This thesis has investigated factors that influence how MI is applied by nurses in child welfare and school health services when counselling overweight and obese children and by pharmacists in community pharmacies in conversations with pharmacy clients. The two studies of this thesis suggest that a major difficulty associated with learning and practicing MI was the new way of thinking and acting that MI requires.

Learning and practicing MI effectively requires more than acquiring certain skills. The MI practitioner must fully understand the essence of MI, which means embracing its spirit in terms of being collaborative, evocative, and honouring client autonomy, and adhering to the principles of expressing empathy, developing discrepancy, rolling with resistance, and supporting client self-efficacy. Although MI counselling may be learnt satisfactorily within a relatively short time frame, it is questionable whether it will be consistently applied with high quality over time unless a deeper understanding of the spirit and principles of MI has been grasped. It is also important to recognize that while new MI skills can be developed with training, it may be difficult to suppress prior counselling habits, including practices that may be inconsistent with MI (Miller & Mount, 2001).

The MI approach contrasts with the authoritarian expert approach of the traditional medical model in which most health care professionals have been trained. MI represents a form of patient empowerment, based on recognition that the clients are in control of the important lifestyle management decisions that affect their well-being. The process of empowerment has been defined as the discovery and development of one's inborn capacity to be responsible for one's own life (Anderson & Funell, 2000). The empowerment model recasts clients from a passive, dependent role to a role in which they actively manage their health care. Instead of assuming that the counsellor is the problem solver and that behavioural change is externally motivated, the patient empowerment model recognizes that the client is the problem solver, with

behavioural change being internally motivated (Foreyt & Walker, 1998; Funnell & Anderson, 2003).

The nurses in study I experienced some difficulties adjusting to the collaborative MI approach. Still, there are aspects of the nurses' usual practice that are consistent with MI since they tend to have a holistic view and are used to working with clients who are in need of behaviour change. The pharmacists in study II demonstrated greater difficulties adjusting to and embracing the new professional role that the use of MI entailed. Pharmacists are educated in a biomedical paradigm, with a primary focus on disease and its treatment. Their usual communication tends to be dominated by queries and advice (Moore, Cairns, Harding, & Craft, 1995). Previous research has indeed shown that it is a challenge for many pharmacists to recognize that counselling is a process of listening and talking with (rather than *to*) another person, and not simply the provision of specific advice or instruction (Benson & Cribb, 1995).

Feedback from clients played a critical role in both studies for the quality and quantity of MI use. MI counselling is a process of preparing people to change instead of telling people what they ought to do (Rollnick *et al.*, 1999). Neither the nurses in study I nor the pharmacists in study II worked with ordinary treatment-seeking patients who approach the health care system for help. The parents in study I and pharmacy customers in study II had the opportunity to leave and not return if for some reason they did not like the counselling. This provides an explanation for the importance attributed to the feedback that the nurses and pharmacists received and their desire to devote their efforts to more motivated clients. It is also likely that persons who have undergone training in MI more recently are more vulnerable to feedback from clients than counsellors who have practiced MI for a long time and who may have more belief in their own counselling abilities.

Both studies demonstrated that many of the difficulties that the nurses and pharmacists experienced were not directly related to MI, but rather to knowledge about and attitudes to the specific health issues to which MI was applied. It is important to distinguish difficulties associated with learning and practicing MI and problems related to its application with different health issues in different contexts. Study I indicated that the use of MI will not be effective unless there is recognition that there is a real health problem to be solved. Thus, many nurses found it difficult to counsel the children and their parents on weight issues simply because many were sceptical as to whether

paediatric overweight or obesity really constituted an important health hazard. The nurses perceived that their scepticism was shared by many of the children's parents, reinforcing their ambivalence concerning counselling the children. Contributing to the nurses' difficulties was the perceived sensitivity of the weight issue. Health care providers may often feel uncomfortable when addressing overweight or obesity issues (Perrin, Flower, Garrett, & Ammerman, 2005).

An important facilitator for MI use among the pharmacists in study II was the opportunity to decide which health-related behaviours MI counselling should be used for. Previous research has identified diet, smoking, diabetes, and asthma as key areas that pharmacists are most likely to work with when counselling clients (Anderson, 1998). This is largely consistent with the findings in study II. Hence, both studies point to the importance of applying MI in areas in which health care providers feel most experienced and knowledgeable. Certainly, possessing considerable MI counselling skills does not compensate for insufficient knowledge about the targeted health issue. Furthermore, the studies suggest that MI counsellors need to believe that they are capable of facilitating health improvements for counselling to be effective.

Although it is ultimately an individual practitioner who uses MI, implementation research has shown that it is important to account for both the inner organizational context in which a new practice is used and the outer context that impacts on behaviour through regulation of professions, broader policies and legislation (Bero *et al.*, 1998). Study II showed that the use of MI was affected by the organizational context in which it was applied. Some pharmacists felt negatively inclined to use the method, because of its top-down implementation in an organizational climate that was described as strained due to staff cut-backs and heavy workload.

7.2. METHODOLOGICAL CONSIDERATIONS

Strategies for enhancing the integrity of qualitative studies need to be applied throughout a research project (Polit & Beck, 2008). Validity and reliability of research in qualitative studies may be examined in different ways than in

quantitative studies. Lincoln and Guba (1985) have suggested five criteria for examining the trustworthiness of qualitative research:

- credibility
- dependability
- confirmability
- transferability
- authenticity

These criteria cover aspects of internal and external validity, reliability, and objectivity.

Credibility refers to confidence in the truth of the data and its interpretations. It is important to carry out a study in a way that enhances the believability of the findings and to take steps to demonstrate credibility to external readers (Lincoln & Guba, 1985). The intention in both articles has been to provide comprehensive descriptions of how the studies were conducted and to show transparency in all steps of the research process. The aim was to allow the readers to decide for themselves if the researchers have done enough to ensure that the conclusions are valid.

Dependability is concerned with the stability (reliability) of data over time and across conditions. Would the findings be repeated if the study was replicated with the same participants in the same (or similar) context? (Lincoln & Guba, 1985). Important steps in the research process have been to conduct literature searches concerning what has already been published, describe the contents and form of MI training and practice, describe the study participants, and provide details about the data collection and the process of data analysis.

Confirmability refers to objectivity. This can be achieved if the findings truly reflect the participants' voice, meaning that they are not the outcome of the subjectivity or bias of the researcher (Lincoln & Guba, 1985). The results in both studies were discussed among the research team and were verbally presented to all study participants in meetings especially organized to ensure that confirmability was met in this research.

Transferability refers to the generalizability of the data, i.e. the extent to which the findings can be transferred to or have applicability in other settings or groups (Lincoln & Guba, 1985). It is obvious that the findings of studies I and II have somewhat limited transferability because studies in other settings may yield different factors modifying, hindering or facilitating the use of MI. It is even possible that other studies conducted in the same settings could identify different factors. However, it is also possible that some of the findings, in particular the finding that it is difficult to raise certain health topics with clients, may be generalizable to similar practitioner groups.

Readers are better able to understand the responder's history if a text achieves authenticity. This refers to the researcher's way of showing truthfulness in the description of the world of the respondents (Lincoln & Guba, 1985). Both articles include a great many of quotations, which should contribute to giving the readers a sense of the respondents' experiences and language.

7.3. FUTURE RESEARCH

This thesis has generated knowledge about factors that impact on the use of MI by pharmacists in community pharmacies and nurses in child welfare and school health services. However, there is a need for more knowledge about the application of MI by different professions in different situations and settings. Important questions to address include the following:

- To what extent do health care practitioners integrate MI-consistent elements and to what extent do they retain MI-inconsistent elements following MI training and using MI in routine practice?

- To what extent is MI competence retained over longer periods of time and which changes does the practice undergo over time?

- What are the biggest challenges to learning and practicing MI for health care practitioners with different backgrounds and varying motivation and competence?

- Which practitioner groups are most likely to use MI to good effect in primary health care and other settings?

- With which health-related behaviours are health care practitioners most motivated to use MI?

- To what extent do health care practitioners perceive that they have a supportive infrastructure for their MI work?

8. CONCLUSIONS

The aim of this thesis was to the investigate factors that influenced how MI was applied by nurses in child welfare and school health services when counselling overweight and obese children and by pharmacists in community pharmacies in conversations with pharmacy clients. It was found that:

- Learning and practicing MI effectively is difficult for many practitioners as it requires a new way of thinking and acting.

- Practitioners' use of MI is not effective unless there is recognition that there is an important health-related problem to be solved.

- Practitioners feel more confident using MI with clients who have health-compromising behaviours and/or risks that the practitioners feel they have expertise in.

- Possessing considerable MI counselling skills does not compensate for insufficient knowledge about a targeted health-related behaviour and/or risk.

- Feedback from clients plays an important role in assessing the quality and quantity of practitioners' use of MI.

SAMMANFATTNING

Livsstilrelaterade ohälsa utgör en stor belastning för hälso- och sjukvården liksom för samhället i stort. Motiverande samtal ("Motivational interviewing", MI) har blivit en allt vanligare metod i hälso- och sjukvårdens arbete för att stödja människor att förändra sina levnadsvanor. Från att ha vuxit fram ur kliniskt arbete och ursprungligen tillämpats för alkoholproblem, har MI fått allt bredare tillämpning för arbete med olika former av beteendeförändringar. MI utgår från fyra principer om att uttrycka empati, utveckla diskrepans, dvs. att uppmärksamma brist på överensstämmelse mellan aktuellt beteende och egna värderingar, undvika att argumentera ("rulla med motstånd") och stödja klientens tro på sin förmåga att genomföra och lyckas med förändringen. Vårdgivaren har ett ledande förhållningssätt för att stötta klienten till att göra en förändring utifrån sin inre motivation, genom att ställa öppna frågor, lyssna, reflektera, bekräfta och summera vad klienten säger. Metoden har blivit alltmer populär och spridd såväl inom hälso- och sjukvården som i andra sammanhang.

Det övergripande syftet med denna avhandling är att bidra till en ökad förståelse om olika faktorers betydelse för att lära sig och praktisera MI. I studie I var syftet att identifiera hinder och möjligheter att använda MI med barn som har övervikt och fetma. Syftet med studie II var att på liknande sätt identifiera hinder och möjligheter för att använda MI med kunder på apotek.

Deltagarna i studie I var fem sjuksköterskor från barnhälsovården i landstinget och sex kommunanställda skolsjuksköterskor, alla från Östergötland, Sverige. Deltagarna i studie II var anställda vid apotek i Östergötland, Sverige. Samtliga deltagare hade medverkat i MI-utbildningar för att lära sig metoden. Data från båda studierna insamlades genom fokusgrupper med deltagarna. Dessa gjordes utifrån intervjuguider vilka bestod av öppna frågor med utgångspunkt från studiernas syften. Studie II inkluderade även fem individuella intervjuer. Data tolkades utifrån ett fenomenologiskt perspektiv.

I studie I var viktiga hinder, sjuksköterskors brist på övertygelse om att övervikt och fetma bland barn utgör ett allvarligt hälsoproblem, problem med

osäkerhet bland sjuksköterskor som upplevde att barns vikt kan vara ett problem fastän det inte fanns någon omedelbar motivation till att göra något åt det och föräldrar som sjuksköterskorna upplevde vara omotiverade att handskas med sina barns viktproblem. Underlättande faktorer inkluderade sjuksköterskors vidkännande av fördelar med att använda MI, föräldrar som var samarbetsvilliga och medvetna om hälsoproblemen, samt arbete med barn med fetma snarare än övervikt eftersom det innebar större probleminsikt hos både sjuksköterskor och föräldrar.

Studie II visade att farmaceuter som tidigare hade deltagit i utbildning som innehöll MI-liknande inslag ansåg att detta underlättade deras användning av MI. Möjligheter att bestämma vilka kunder och hälsorelaterade problem man skulle tillämpa MI på var också en underlättande faktor. Farmaceuterna ansåg att den fysiska omgivningen på apotek var gynnsam för MI, men de upplevde tidsbegränsningar när det fanns många kunder i lokalerna. De upplevde flera svårigheter med den praktiska tillämpningen av MI, som att initiera och avluta samtal med kunder. Studierna visar på att det är svårt att lära sig och tillämpa MI för många utförare då metoden i många avseenden kräver ett nytt sätt att tänka och agera. Utförarnas tillämpning av MI är inte effektiv om det inte finns en insikt om att det finns ett viktigt hälsorelaterat problem att lösa. Utförarna känner sig mer säkra på att använda MI med klienter som har hälsovådliga beteenden och/eller risker, där utförarna känner att de besitter expertkunskap. Att besitta betydande MI-kompetens kompenserar inte för otillräcklig kunskap om det hälsorelaterade beteende och/eller risk som man tillämpar MI på. Återkoppling från klienter spelar en viktig roll för utförarnas MI-användning.

Nyckelord: barn, rådgivning, motiverande samtal (MI), sjuksköterska, övervikt, farmaceut.

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