Introduction

Even as the profession of dental hygiene reaches its 100th anniversary this year, dental hygienists today are still trying to solve the mystery of patient compliance.

This month's Sunstar Spotlight highlights an interviewing technique that may help patients implement positive behavior changes, while curtailing or eliminating negative health habits, with the goal of improving both patients' oral and systemic health.

Jacqueline J. Freudenthal, RDH, MHE, provides directions for using the motivational interviewing technique, such as knowing when to listen, how to ask for pertinent information, and when it is best to provide direction. Hopefully, these skill sets will help you assist your patients in making a change toward improved oral health.

In order to improve both the oral and systemic health of their patients, dental hygienists are always searching for approaches that will motivate individuals to not only change risk-related behaviors, but also implement preventive habits. Traditionally, dental hygienists and dentists have used educational strategies to advise, encourage, and persuade individuals to change behaviors that adversely impact their health. In light of the high levels of oral diseases present in the United States today, traditional advice-giving appears to be insufficient to improve preventive behaviors or alter deleterious habits. Acceptance of advice seems to depend, to some degree, on each individual's perception of advice-giving and the manner in which the recommendations are provided. Oral health professionals who have not found success with traditional advice-giving may want to consider motivational interviewing (MI)—a patient-centered approach that helps individuals deal with their ambivalence about behavior change.
ORIGINS OF THE MOTIVATIONAL INTERVIEWING TECHNIQUE

MI is a behavior change model developed by William R. Miller, PhD, a clinical psychologist, in the early 1980s. It arose from observations on how the manner in which patients were addressed influenced their willingness to discuss behavior change. MI was originally developed as a counseling approach for people with substance abuse problems. Counselors who used a client-centered approach while demonstrating empathetic understanding reported positive changes in patients' drinking habits. The basic idea is that patients who allow themselves to discuss their current habits and then determine the need for changes in their behavior become more motivated to actually make those changes.

As part of developing MI skill, interviewers must determine the individual's readiness for change and adapt their approach accordingly. Based on Prochaska's Stages of Change Model, which proposes that behavior change is not an event but a process, any movement along the readiness to change continuum is seen as positive. There are five distinct stages in this model: precontemplation, contemplation, preparation, action, and maintenance. Changes are influenced by an individual's confidence in his or her ability to change specific behaviors. Positive behavior change can occur with or without formal intervention as the process and readiness for change appear to be the same. Brief counseling sessions are intended to hasten the natural process for change.

WHAT THE EVIDENCE SAYS

As the success of MI in the treatment of risky behaviors and substance abuse spread, clinicians began to consider how this type of intervention could be applied to the management of chronic diseases associated with unhealthy behaviors. MI is currently being studied as a means to reduce body mass index, blood cholesterol, blood pressure, dental caries, and the risk of diabetes, as well as improve exercise habits. Based on currently available evidence, it is difficult to determine whether interventions adhered to true MI principles or an adaptation of MI based on individual researchers' perceptions. This makes it difficult to form conclusions regarding the variables that influence responsiveness to MI interventions. Although no studies describe adverse or damaging effects from the use of MI, its popularity may have preceded the availability of evidence for its effectiveness.

The proficient use of empathetic understanding and provoking patients' desire to change are the basis for MI's effectiveness. The quality of interaction between the clinician and the patient influences behavior outcomes. Some clinicians are significantly more skilled at using this brief counseling technique to inspire motivation. Just as patients must endeavor to find internal motivation to begin and continue lifestyle changes, clinicians must practice and improve their skillfulness in MI. The tenets of improving MI skill include attending workshops or completing coursework, receiving feedback from MI experts on their performance, and individual coaching.

Two systematic reviews investigated the outcomes of MI. Dunn et al observed that most studies used research staff vs practitioners in actual clinical settings. The researchers also

EXAMPLE OF MOTIVATIONAL INTERVIEWING

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<tr>
<th>Rapport, Empathy, and Trust</th>
<th>Explore Ambivalence</th>
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<tr>
<td>Demonstrate genuine concern and understanding, build trust, provide affirmation.</td>
<td>Accept uncertainty as common and normal but resolvable.</td>
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<td>Explore the discrepancy between what is occurring and what is desired in the future.</td>
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<th>Reflective Listening</th>
<th>Assess Readiness to Change</th>
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<tr>
<td>Active listening is imperative.</td>
<td>Be careful not to overestimate the patient's stage of change.</td>
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<td>Reflect what the patient is saying by paraphrasing.</td>
<td>Help the patient weigh the pros and cons of making a change.</td>
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<tr>
<td>Ask open-ended questions to encourage the patient to talk.</td>
<td>Use open-ended questions to determine readiness to change.</td>
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<td>Reflecting feelings of ambivalence leads to discussion of the value of change and problem solving.</td>
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<th>Roll with Resistance, Accept Resistance</th>
<th>Autonomy</th>
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<td>Strive to understand the patient's situation.</td>
<td>Enhance self-efficacy.</td>
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<td>Encourage the patient's active role in decision making.</td>
<td>Highlight prior successes.</td>
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<td>Seek patient input.</td>
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<td>Do not deny the patient's experiences.</td>
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<td>Empathize when frustration is present.</td>
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<td>Stress choices.</td>
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found it difficult to ascertain adherence to the spirit and style of MI in most of the studies reviewed. As such, the authors concluded a need for additional research into the theoretical components of MI and the variables that influence individuals’ responses. Rubak et al found that MI used in scientific settings was more effective than advice-giving sessions in 80% of the studies reviewed. The effect of the interventions tended to correlate with the number of encounters (from one to more than five). Neither review demonstrated how the relationship between the interviewer and the patient influenced the outcome, but both studies speculated that this relationship affects the end results.

UNDERLYING PRINCIPLES

An underlying principle of MI is that the patient, rather than the clinician, voices arguments for change (Table 1). Individuals are encouraged to resolve ambivalence about changing behaviors instead of presenting arguments for or against change. Most people experience ambivalence about behavior change because it frequently has both positive and negative aspects. MI is viewed as an alternative to direct persuasion. Even when an individual can visualize the benefits of adopting positive health behaviors, barriers and challenges often exist that must be overcome or sustained. Identification of barriers is essential for problem solving. Once a problem is identified, the interviewer asks permission prior to offering information, advice, or guidance. For MI to be successful, the patient must be allowed to make decisions and exercise autonomy over his or her choices and behaviors (See Products In Practice sidebar).

APPLICATIONS IN THE DENTAL SETTING

Oral care providers are also investigating whether MI can be adapted to improve dental health outcomes in a cost-effective manner. The brief counseling style fits especially well within the structure of dental/dental hygiene appointment schedules. Dental hygienists tend to spend quality time with patients and develop trusting relationships. Comprehensive oral care can require multiple appointments, depending on the diagnosis and care plan. MI can be used to improve compliance with preventive regimens, as well as to reduce or eliminate negative behaviors, such as tobacco use. The sidebar provides an example of MI in a dental setting.

The first research on using an MI approach to improve oral health involved 240 Punjabi-speaking children (6 months to 18 months) living in British Columbia, Canada. Weinstein et al found that children of mothers who experienced an MI intervention had fewer caries lesions after 1 year to 2 years, and better compliance with fluoride varnish applications, even without follow-up during the second year. Community workers were trained in the use of MI and served as the interviewers for the studies.

Ismail et al recently completed a randomized trial evaluating the effectiveness of MI on oral health behaviors and new untreated caries lesions. The target population included caregivers of 1,021 low-income African-American children living in Detroit. The intervention group received MI, a DVD, and follow-up contact. The control group received an educational DVD and oral health recommendations for their children. Oral examinations were conducted on all children and caregivers. Following examination, the caregivers met with a qualified MI interviewer and viewed an educational DVD. Follow-up was conducted with the intervention group within 6 months. The caregivers in the MI group reported checking for white spot lesions and ensuring their child brushed at bedtime. However, when reexamined 2 years later, the intervention group did not have fewer untreated caries lesions than the control group.

For some communities, populations, and situations, the barriers and challenges to implementing MI may be too great to achieve measurable long-term outcomes. Sometimes, small behavior changes help individuals take incremental steps toward improving their health. Most oral health studies using MI have been conducted in community settings rather than private practice settings. Additional challenges are experienced in community settings if preventive and regular oral health care is...
compliance improves and they are more likely to commit to the recommended self-care regimen. If they choose it, they will use it.

Despite years of educating patients about the importance of flossing, only about 25% of people actually floss on a regular basis. By engaging in meaningful conversations with patients to understand why they omit flossing from their oral health regimen, dental hygienists can identify possible alternatives that may address their needs more success - fully. When presented with options, patients can find products they are more likely to use—leading to increased compliance and, ultimately, better oral health outcomes.

Taking this concept into consideration, Sunstar Americas provides numerous options for patients, such as GUM® Soft-Picks®, Eez-Thru® Flossers, Go-Betweens®, and EasyThread™ Floss. The New EasyThread Floss is a double-ended threader within a traditional dispenser. It is especially beneficial for patients with orthodontic appliances, bridges, and implants. Patient sample envelopes are available so you can introduce the product to your patients. Sunstar Americas provides a broad spectrum of interproximal products to help your patients improve their oral health. The new Easy Thread floss demonstrates Sunstar's mission to offer innovation with interproximal products that fulfill real and unmet patient needs.

was again evaluated for their adherence to MI principles. Most of the students followed the basic MI principles, demonstrating that MI may be a useful method for students and practitioners to incorporate into patient encounters.13 Incorporating MI into educational programs may enhance students' understanding of a planned and deliberate intervention to influence oral health outcomes for their patients.

CONCLUSION

MI provides an alternative strategy for promoting lifestyle changes critical for improving patient outcomes, decreasing pain and health care costs, and increasing quality of life. Additional research on the MI process should be conducted to determine the most influential aspects of the behavioral change process including change talk, discrepancy, readiness for change, and barriers to change.11 The change process is not a singular event and it can be interrupted by periods of remissions or relapse. Frequency and intensity of the MI programs may enhance students' understanding of a planned and deliberate intervention to influence oral health outcomes for their patients.

Two studies looked at whether the inclusion of MI into dental and dental hygiene curricula was an effective way to incorporate this technique into patient care.12,13 Students in each of these studies completed previous coursework in basic communication skills. Reading assignments and lectures were incorporated as part of MI training for both groups. The Hinz study required dental students to choose a patient they believed could benefit from changing a health behavior. Following the interaction, they submitted a report describing the patient; his or her readiness for change; and examples of MI principles used, patient reactions, encountered resistance, and patient responses. The reports were evaluated based on their use of MI descriptions and an assessment of their utilization of MI techniques.12 Basic training appeared to help the dental students identify their patients' readiness for change and recognize resistance based on self-report. The students reported a positive response to their attempts to use MI and felt it enhanced their relationship with patients.12

Crofoot et al recorded dental hygiene students providing a brief education intervention. The recording was evaluated by how closely the students adhered to the principles of MI, with followup feedback and individual coaching that emphasized the use of empathy, open-ended questions, affirmations, and reflective listening. Students then made a second tape, which

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References

7. Rollnick S. Comments on Dunn et al’s “The use of brief Interventions adapted from motivational interviewing across behavioral domains: a systematic review”. Enthusiasm, quick fixes and