

City University of New York (CUNY)

## CUNY Academic Works

---

Publications and Research

Hostos Community College

---

2016

### The expert advice: Dental patient compliance hinges on effective communication strategies

Diana V. Macri  
*CUNY Hostos Community College*

[How does access to this work benefit you? Let us know!](#)

More information about this work at: [https://academicworks.cuny.edu/ho\\_pubs/39](https://academicworks.cuny.edu/ho_pubs/39)

Discover additional works at: <https://academicworks.cuny.edu>

---

This work is made publicly available by the City University of New York (CUNY).  
Contact: [AcademicWorks@cuny.edu](mailto:AcademicWorks@cuny.edu)

Compliance: from the Latin word *complire*, meaning to fill up and hence to complete an action, transaction, or process and to fulfill a promise. The acting in accordance with, or the yielding to a desire, request, condition, direction.

Most dental hygienists would agree that motivating patients to adopt good oral health behaviors, often referred to as compliance, is the most challenging aspect of practice. This critical component of patient care is not unique to dentistry and dental hygiene. In 2010 the costs of health care in the US exceeded \$2.7 trillion with “between \$100 and \$300 billion of avoidable healthcare costs [attributable] to nonadherence in the US annually”.<sup>1</sup> Nonadherence (a term used in the medical literature which is synonymous with noncompliance) is associated with progression of disease and, subsequently, poor health outcomes resulting in an additional burden of billions per year in avoidable health care costs. As oral health researchers continue to provide scientific evidence to further support the connection between oral and systemic health, it has never been more important for dental hygienists, as disease prevention specialists, to adopt techniques which can improve communication and patient compliance.

## The Current Situation

Patient demographics on compliance are small and noncompliance is widespread. This is due to many reasons including patient self-determination, depression, health literacy, lack of support and resources.<sup>2,3</sup> Traditional dental health education approaches, whose main focus is on improving oral health knowledge, have not been effective in improving the nation’s oral health. Consider:

Dental caries remains the most prevalent chronic disease in both children and adults, even though it is largely preventable.

42% of children aged 2-11 have had dental caries in their primary teeth<sup>4</sup>

21 % of children 6-11 have had dental caries in their permanent teeth<sup>4</sup>

59% of adolescents 12 to 19 have had dental caries in their permanent teeth<sup>4</sup>

92% of adults 20 to 64 have had dental caries in their permanent teeth<sup>4</sup>

18% of seniors 65 and older have untreated decay<sup>4</sup>

2. In the United States, 47.2 percent of adults have mild, moderate or severe periodontitis<sup>5</sup>

3. Only 64% of Americans have visited a dental office in the past year.<sup>6</sup>

Generic recommendations such as 'brush your teeth twice a day for two minutes and limit your intake of sugar' have had limited success in changing oral health practices and improving overall systemic health. Why don't Americans place a higher value on their oral health? What can dental hygienists do to improve the public's opinion of oral health?

## Psychological Approaches to Behavior Change

In their systematic review Newton and Asimakopoulou<sup>7</sup> identified 19 studies which tested psychological models and their effect on oral hygiene-related behaviors. Their findings are summarized in Table 1. All the models utilized several variables which increased the likelihood of participants' adopting positive oral hygiene behaviors. The most important of these are the perceived benefits of a behavior and a person's self-efficacy. Additionally, models which utilized goal setting, planning and monitoring of behavior were more effective than those which utilized different interventions. The authors noted the poor quality of studies and high risk of bias. Clearly, this is a field which is in desperate need of study.

Two approaches which merit deeper discussion are Cognitive Behavior Theory (CBT) and Motivational Interviewing (MI).

### Cognitive Behavior Theory (CBT)

CBT is a technique focused on adjusting thought patterns that cause negative emotions and, consequently, behavior. It first emerged in the 1960s and differs from other therapeutic techniques most notably in its simplicity. CBT doesn't aim to explore a person's upbringing and development the way that psychoanalysis does. Rather, CBT implies that distress is caused by irrational beliefs, and it's within a person's power to recognize those beliefs and change them. Maya Angelou was on to it when she said "Do the best you can until you know better. Then when you know better, do better."

CBT has received a great deal of attention and its success in treating a variety of mental disorders (including anxiety and depression) is well documented.<sup>8,9</sup> There is also evidence that it improves medication compliance which is, no doubt, what has prompted some oral health researchers to apply its principles to the broader topic patient compliance in oral health.

### Motivational Interviewing (MI)

Miller and Rollnick<sup>10</sup> state that "for a person to change they must feel both confident in their ability to change and believe the change is important to them". MI sees behaviour change as a partnership between the patient and the dental hygienist that respects autonomy, enabling the patient to feel engaged, understood and empowered. Rather than the dental hygienist assuming the role of 'expert', MI places the patient in that role, letting them decide how to integrate information and make the final decision as to whether the behavior is relevant and important for them to adopt. During MI the dental hygienist's goal is to resolve ambivalence toward change in the patient and tap into their already existing motivation by eliciting 'change-talk' and using reflective listening, affirmation and summations. Ambivalence is the term used to describe patients whose actions do not match their desires. A patient that states they want to prevent periodontal disease yet they do not floss or brush regularly is displaying ambivalence.<sup>11</sup>

MI allows the patient to exercise autonomy and encourages Shared Decision Making. In contrast to the old model of paternalism, where the dental hygienist may have dictated recommendations to the patient, Shared Decision Making is a process where a healthcare provider and the patient arrive at decisions regarding the patient's care together.<sup>12, 13</sup> It has become the standard of care in medicine and dentistry is slowly catching on. Table 2 below discusses the four components of MI.

Studies have shown an improvement in MI when the clinician follows up the initial conversation to maintain contact, problem solve, reinforce commitment and provide support. Ideally this would be done in a face to face meeting at the dental office but a conversation over the telephone is sufficient and has been shown to increase the effectiveness of MI.

## Conclusion

Patient compliance begins with a good understanding of the human psyche and the motivations behind our behavior. While most dental hygiene programs require that students complete an introductory psychology and sociology class as part of their degree completion, the content offered is barely enough to make a dental hygienist proficient in any of the techniques mentioned here. However, lifelong learning is a responsibility dental hygienists take when they assume the role of professional. While the dental literature is lacking in content regarding effective behavior modification techniques which oral health professionals can implement, the medical literature offers a great deal of information and sources. The Journal for Patient Compliance offers easy to understand, readily accessible peer-reviewed articles on all aspects of compliance. Behavior Modification is another peer-reviewed journal devoted exclusively to the topic of changing behaviors in psychiatric, clinical, educational, and rehabilitative settings.

Evidence Based Decision Making requires that dental hygienists keep current with the most recent evidence and master skills which improve patients' health outcomes. Continuing to utilize outdated and

ineffective practices endangers patient health, minimizes the practice of dental hygiene and contributes to the poor health of Americans. Exploring new paths can be frightening. However, dental hygienists in the past two decades have done a great deal to expand the body of research regarding dental hygiene and there is no single practice which has a greater, longer lasting impact on oral health than practicing proper oral hygiene. If we can find the most effective way of ensuring patient compliance there is no doubt that the incidence of oral disease in this country would drop drastically. At the end of the day, that is our greatest responsibility.