Hand-over-mouth: No Science and No Social Validity

Reprinted on the adjacent page is an editorial penned nearly 12 years ago by one of my predecessors, Paul S. Casamassimo.[1] In it, Dr. Casamassimo eloquently detailed the arguments against the use of hand-over-mouth (HOM) as an acceptable behavior guidance technique. He described the dearth of research on the technique and low likelihood that we will never know what long-term effects, if any, HOM has on the child's developing psyche. He even correctly placed the word, "maybe" in the editorial title. In fact, it was not the last editorial on HOM, but perhaps this one will be.

Standards of health care are constantly evolving. One role of the American Academy of Pediatric Dentistry (AAPD) is to stay abreast of those changes by developing and promoting guidelines that are recognized as exemplary by our patients, the public, and colleagues in health care. One point highlighted at the AAPD's Behavior Management Consensus Conference in November 2003 was that the appropriateness of a behavior management technique is defined by multiple communities of interest. Patients, parents, health care professionals, attorneys, educators and third party payers are some of the communities int0erested in behavior guidance techniques used by dentists.

In considering the current status of HOM, it is fair to ask "Is it an appropriate technique for managing pediatric patients in a clinical situation?" and "Would I accept the use of this technique for my own child?" Two salient determinants of appropriateness are: 1) effectiveness and 2) social validity.[2] In the right hands, HOM can be astonishingly effective. In the wrong hands, it may have seriously deleterious effects. In neither instance, however, does the technique carry *social validity*. This is clearly confirmed by the study by Eaton and coauthors appearing in this issue. After viewing videotapes of 8 behavior management techniques, parents ranked HOM last in acceptability. HOM's social validity has diminished over the past 20 years,[3,4] and will likely continue to do so.

HOM is viewed by some as unethical, perhaps even immoral. Others have equated HOM with child abuse, assault and battery. At least one state's information to dental personnel on identifying child abuse and neglect illustrates a lip injury inflicted by "placing a hand over the mouth in an attempt to quiet the child."[5] The Oregon Board of Dentistry noted in 2003 that a bill proposed in the state legislature would extend the definition of strangulation to include "blocking the nose or mouth of another person." The minutes noted that dentistry would be granted an exclusion from this definition for "legitimate medical procedures."[6]

A further argument is that HOM damages the psychological development of the child who was on the receiving end of the technique. As a resident, I was taught that HOM was "psychologically neutral," and that it might even lead to improved self esteem among children who were able to manage their anxiety for the remainder of the appointment. But so far as I could determine, there was no scientific evidence to support that view. Later, one study suggested that HOM (and restraint) may not produce long-lasting dental fears,[7] but the inevitable inadequacies in designing a study of this type cast doubt on the validity of that conclusion.

Why has more not been done to explore HOM's long-term effects? I believe it is because HOM is a dying technique. Data presented at the Behavior Management Consensus Conference indicated that HOM is being used by only 21% of AAPD members.[8] Half of the respondents indicated they were using HOM less in 2003 than they had 5 years previously, and a quarter of those using HOM predicted that they would be using it even less in the near future. A minority of predoctoral and postdoctoral programs were teaching HOM as an acceptable technique, and most were teaching it as an unacceptable way to manage behavior.[9, 10] Support of HOM is just too weak to justify expending resources on studying its long-term effects.

It is time for us to recognize that there is no longer a place in our armamentarium of acceptable behavioral guidance techniques for HOM. The AAPD should set a timetable for its exclusion from our guidelines. Those who wish to continue to use the technique could do so, but not with the imprimatur of the AAPD. Alternative techniques exist, and others must be developed to supplant a practice that has outlived its place in pediatric dentistry.

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