

## The role of the dental hygienist in forensic dentistry

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Forensic Dentistry is that part of science that deals with Dentistry and the Law. All the members of the dental field have knowledge and expertise they can contribute to the field of Forensic Dentistry.

Emphasis is placed on the valuable role that dental hygienists and other dental professionals can uniquely and jointly play in gathering, collaborating and interpreting evidence for identifications.

This is brief overview of the aspects that hygienists can become involved in and the skills that they possess through their education, professional practice and dental jurisprudence.

Participants will:

- Learn the basic activities of a Multiple Fatality Team.
- Explore and appreciate the contributions dental hygienists/professionals have made in working with a team on multiple fatality disasters.
- Become acquainted with areas of forensic dentistry and avenues to become involved directly and indirectly with Forensic Dentistry.

## Utilizing nature's bio-adaptability of soft and hard tissues

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Orofacial Myology/Orofacial Myofunctional Therapy is the study and therapeutic treatment approach of utilizing the junction between nature's muscular and behavioural forces and the normalizing bio adaptability of the soft and hard tissues in the orofacial environment. This 'Function Junction' takes place between the functional relationships of the orofacial musculature; functional use and movement patterning of the mandible; orofacial para-functional behaviour elimination abilities; resting postures of the tongue, lips, and mandible; establishment of an adequate dental freeway space; and the nasal respiration impact on the hard and soft tissues of the dental and orofacial structures. The Function Junction harnesses orofacial and oromotor forces in a therapeutic retraining manner to eliminate harmful behaviours. Therapeutic exercises are both physical and psycho physiologic. These exercises are the initiating facilitators creating a neuro-muscular impact.

Change occurs by retraining and/or eliminating negative biologic and physiologic forces applied to the orofacial environment, dentition, temporomandibular joint region, and along with retraining movements of the tongue, lips and mandible affecting functional speaking patterns. 'Function' refers to the movements and patterning impact of the orofacial muscle balances and harmony of the oromotor behaviours. These include habituated oromotor movement patterns of the tongue, lips and jaw, in addition to correcting resting postures, establishing the dental freeway space, and facilitating nasal respiration. It also includes the impact of parafunctional habits and orofacial behaviours exerted on the dentition and the surrounding head/neck environment.

## Gender variations in determinants of oral hygiene behaviour: a secondary analysis

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**Objectives:** The aim of this secondary analysis was to investigate gender variations related to oral hygiene behaviour (OHB), i.e., gender differences in the level of OHB, gender differences in

the psychological factors as defined by the expanded Theory of Planned Behaviour (TPB), and gender differences in the relationships between the psychological factors and OHB.

**Methods:** Using an Internet questionnaire and culturally adapted paper-and-pencil-questionnaires in a total of seven populations, 955 adult participants – 274 males and 681 females – were asked about their OHB, and the potential determinants of OHB, including attitudes (ATT), social norms (SN), perceived behavioural control (PBC), oral health knowledge (OHK), and expected social outcomes for having healthy teeth (ESO).

**Results:** No significant differences were found. Only in three out of six samples, females reported a better OHB, and just in one sample they reported a more positive attitude than males. No interaction effects between gender and the potential determinants on OHB were found. Exploratory regression analyses revealed only a few variations in predictors of OHB between males and females, in that for male's social related aspects as SN, ESO and PBC are relatively important determinants of OHB, whereas among females attitude and OHK are relevant.

**Conclusions:** All analyses considered, no consistent pattern was found and no decisive factor emerged. However, gender variations in OHB and in the determinants should be considered when designing practical recommendations for improving OHB. Insight in gender variations in the determinants of OHB is relevant to refine preventive approaches to modify OHB for male and women in the desired direction. There is a need of further experimental research in this area for the development of tailored oral hygiene interventions.

## Oral care: knowledge and assumptions of early childhood educators

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**Objectives:** Dental caries is a problem nationally. The Western Cape is recorded as having the highest incidence of dental caries. This study sets out to determine the oral health care knowledge, assumptions and beliefs of educators of children between the ages 3 and 5 years.

**Methods:** This descriptive study is of a qualitative and quantitative design. One hundred early childhood educators were randomly selected from schools and crèches in the Western Cape. They were selected on the basis of whether they had a teacher's degree or certificate or were untrained. Data was collected through a questionnaire with open- and closed-ended questions based on the literature. A pilot study was conducted at 10 schools. No changes were made to the questionnaire. The quantitative data was captured and analyzed using SPSS. The qualitative data was categorized into themes from the literature.

**Results:** The return rate of the questionnaire was 63%. The diploma and certificate educated participants were in the majority (68%). Thirty-eight percent of educators taught children the importance of brushing. 37.5% of educators believed that children should be assisted with brushing. Twenty-eight percent of schools had brushing programs. Thirteen percent of educators believed children should brush three times a day. Eighteen percent of educators were unsure whether to use toothpaste with fluoride. Interventions have been implemented at one of the schools thus far. The shortcomings were addressed such as the importance of teeth and why we brush our teeth. Children's diet in relation to plaque, teeth and decay was identified as one of the factors that showed limited knowledge.

**Conclusions:** Educators recognized the importance of primary teeth. However, they lacked important information about oral health