

## Efficacy of educational intervention on plaque index among pre-school children

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### Abstract

**Introduction:** Dental plaque is the main factor of tooth caries and periodontal diseases, especially in childhood which is preventable by oral health education. We studied on efficacy of some interventional methods.

**Materials & Methods:** Ten kindergartens With 126 three till five year-old kids randomly were participated in a randomized clinical trial in Amol, a city in the North of Iran. Effective factors in attending in study were no systematic diseases, not using medicines, no heavy crowding or no wearing appliances. Plaque was measured by Silness and Leo index. Groups are: 1. Tooth brushing instructions to children themselves, 2. tooth brushing instructions to children with a gift, 3. tooth brushing instructions to mothers and brushing under supervision of parents, 4. health instruction to mothers and brushing by parents, 5. health instruction to trainers and brushing by children. Dental visit was done 0, 1 week, 1 month and 3 months later in the morning, before having breakfast.

**Results:** Groups 5, 4, 2, and 3 had more reduction in plaque index respectively.

**Conclusion:** This study showed that kindergarten trainers have more ability to teach children with various teaching techniques.

**Key words:** Plaque index, Educational intervention, Clinical trial