



## I. ABSTRACT

Urbanization, socioeconomic and cultural changes led to changes in the extended family life. When two incomes are needed for families mothers tend to employ outside their homes. Since both parents are employed, their children are looked after by caregivers in day care centres during their working hours. Activities carried out by the caregivers or children at day care centres affect children's oral health. Dental caries is an infectious and highly prevalent disease in children which can be prevented if the correct knowledge put into practice. Transmission of *Streptococcus mutans* is not limited to the mother to child relationship. Thus any caregiver can transmit infection as can playmates. The aim of the study is to assess oral health knowledge and practices of caregivers in day care centres and their contribution to maintain oral health status of children in day care centres.

A descriptive cross sectional study was carried out in Nugegoda, Maharagama and Piliyandala Medical Officer of Health (MOH) areas in Colombo district among 163 caregivers from 54 day care centres. Sample size was calculated using probability proportionate to size technique. Data were collected by using a pre tested interviewer administered questionnaire and clinical oral examination of caregivers for caries was performed using World Health Organization standard criteria.

The majority 61.35% of the study sample had inadequate oral health knowledge with a mean knowledge of 28.77 (SD 12.29, Maximum score 70) When considering practices of caregivers, 85% of the caregivers brush their teeth twice daily. Fluoride toothpaste was used as the single most material for brushing by 79.7% of the study sample and 7.9% used toothpowder alone or with the other toothpastes. Only 22.1% get treatment from a dental surgeon, (28.2%) wash their mouth with salt water and (19.6%) do other home remedies as the mode of initial treatment for tooth pain.

Caries free caregivers were comprised of 14%. The majority of the sample (52.8%) had DMFT 1-10

Regarding activities carried out by the caregivers in children 35.97% of the caregivers found washing toys soon after the child puts into the mouth, checking children's teeth once a month by 34.97% of caregivers and only 15.95% of caregivers had a habit of brushing children's teeth at day care centres. Cooperation of the children during tooth brushing at

day care centres was 100%. Most of the caregivers (94.48%) had adequate time for carrying out the activities and cooperation given by the parents and the other supportive staff was highly satisfactory. There was statistically significant association found between oral health knowledge and habits of checking children's teeth once a month ( $p < 0.05$ ). A very high statistically significant association ( $p < 0.001$ ) was found between oral health knowledge and the use of toys by the children without salivary contamination.

Health education programmes should be carried out regarding oral health giving capitalizing the knowledge on horizontal transmission that could occur in a day care setup, the wrong practices which they can easily be prevented and importance of brushing children's teeth daily. Training the caregivers on early identification of caries lesion through visual inspection is a must in preventing dental caries progression in children.