INTRODUCTION

Early childhood caries (ECC) is defined as “The presence of one or more decayed teeth (non-cavitated or cavitated lesions), missing teeth (due to caries), or filled tooth surfaces in any primary tooth in a child 72 months of age or younger.”

ECC is associated with deterioration in quality of life among young children. Among them is the Early Childhood Oral Health Impact Scale (ECOHIS) developed by BT Pahel et al. to assess the impact of oral disorders on quality of life among preschool children (0 to 5 years of age).

Adults generally make decisions about their children’s health. Therefore, assessing parent’s perceptions about how oral health problems, including symptoms, disease and its treatment, influence their children’s quality of life is important.

HYPOTHESES

• H01: Early childhood caries affect the oral health-related quality of life among preschool children

• To determine prevalence of dental caries in preschool children in Rohtak City

• To suggest measures to improve oral health-related quality of life among 3 to 5-year-old preschool children.

MATERIALS AND METHODS

Study Design: Cross-sectional Study

Rohtak City divided into 4 zones

Random selection of 3 schools in each zone

Study Subjects (n = 469)

Questionnaire assessment

Clinical examination

Early Childhood Oral Health Impact Scale (ECOHIS)

Family Impact Section (4 items)

Child Impact Section (9 items)

Caries assessment by Caries Assessment Spectrum and Treatment (CAST) index

Caries assessment done

INCLUSION CRITERIA

• Children aged 3-5 years.
• Children present on the day of examination.
• Children whose parents have given informed consent.

EXCLUSION CRITERIA

• Children of parents with poor compliance.
• Children absent on the day of examination.
• Un-cooperative child.
• Child with congenital and developmental anomalies.

RESULTS

Distribution of study population

<table>
<thead>
<tr>
<th>Age group</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>78</td>
<td>28.8</td>
<td>43</td>
</tr>
<tr>
<td>4.0</td>
<td>119</td>
<td>43.9</td>
<td>86</td>
</tr>
<tr>
<td>5.0</td>
<td>74</td>
<td>27.3</td>
<td>69</td>
</tr>
<tr>
<td>Total</td>
<td>271</td>
<td>57.8</td>
<td>198</td>
</tr>
</tbody>
</table>

Mean age of study population = 4.047 ± 0.7496

Caries prevalence

![Caries prevalence graph]

Mean ECOHIS Scores

![Mean ECOHIS Scores graph]

Cronbach’s alpha (ECOHIS) = 0.873

Mann Whitney U test was significant. P value < 0.01

DISCUSSION

The present study evaluated the impact of dental caries on the OHRQoL of preschool children using the Hindi version of the ECOHIS. Prevalence of ECC was 32%, which is higher than Wong HM et al. and lower than Prakash SS et al. The mean ECOHIS was lower than Gomes MC et al. Higher ECOHIS scores are observed in subjects having dental caries than those who are caries free. ECOHIS was correlated to def which was statistically significant and similar to what was reported by Wong HM et al., Scarpelli AC et al. and Martin Junior PA et al. The findings of this present study confirm the hypothesis that ECC adversely affect the OHRQoL among preschool children. Internal consistency of the scale using Cronbach’s alpha (0.873) was close to the original version (0.9). The present study has limitations inherent to the cross-sectional design and answers to the questions may be subject to information bias.

CONCLUSION

Early childhood caries significantly impact the oral health-related quality of life among preschool children. Assessment of the OHRQoL among young children helps to identify needs, which can guide the planning and decision-making process regarding the implementation of strategies for preventive oral healthcare services.

REFERENCES