



# AN UPDATED VERSION OF 'ORAL HEALTH IMPACT PROFILE' QUESTIONNAIRE MODIFIED FOR CHILDREN (OHIP-MC)

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**Abstract:** A self-reporting oral health impact profile was developed to examine and elicit the children's responses towards various parameters which includes physical pain, physical disability etc. The children to be tested will be in the age range of 6 to 11 years where they can understand and interpret question for proper elicitation. The responses will be recorded by using modified Likert scale (gender specific for boys & girls/ separate questions will be given for both the gender) our newer scale can be an excellent tool for multidimensional assessment of child and his limitations.

**Keywords** - OHIP/OHIP-14, OHIP-35, Oral Health, Functional Limitation, Psychological Discomfort

## INTRODUCTION

There are different scales for measuring OHRQoL, the various physical, social, and psychological aspects of life. The scales focused on different dimensions and populations. The OHIP is the most extensively used scale with its short form OHIP-14 being accepted more because it offers feasibility and can be applied clinically. It is found to be effective in different sample sizes, gender groups and contexts like in geriatric population so far. It is also used as tool for quantifying psychological and social behaviour for measuring OHRQoL.<sup>1</sup> It was first developed and introduced by G.D Glade & A J Spencer in year 1994 they formed the OHIP-49 questionnaire considering various parameters.<sup>2</sup> It is the tool which determines the perception of social impact of oral disease on their live in the population it is applied and also intended to provide data on the impact perceptions.<sup>3</sup>

OHIP covers the functional and psychosocial aspects of oral health. In recent times the attention has been paid on patient concerned outcomes and it is been promoted also as clinical outcomes alone are not considered adequate enough for evaluating oral health needs of population which has initiated a formulation of oral health related quality of life measures. It has been tested in variety of populations and has been found as an effective indicator among them OHIP-14 is most widely used and proved valid and reliable tool. It is found superior in discriminating between groups with impacts and without impacts.<sup>4</sup> The scale must be such that it reproduces similar results at two different points in time for same patient it has tested keeping in fact check that patient's clinical status has not changed over the period of time. The epidemiological studies on oral health have used various methods of evaluating the extent upto which oral conditions affect the normal social life impairs in normal functioning and behaviors they are known as socio-dental indicators or oral health related quality of life measures.<sup>5</sup>

**UNIQUENESS OF OUR SCALE -**

In our scale we have 05 questions in all the 07 parameters like functional limitations in children, physical pain in children etc., the questions are modified for all the parameters, made inclusive of all the difficulties faced by children and adolescents of this age group which limit or impairs their function likewise added painful and unpleasant scenarios are added which hampers physical, psychological and social aspects of these age group people. The questions are in simple forms for easy understanding, interpretation and for recording responses (Table 01). Two are different sets of questionnaires separate for girls and boys with total of 35 questions in each set present.

**5-POINT SCALE -**

A modified 5-point Likert Scale is being used for assessing and recording the responses. The scale has 5 different sets of emojis for boys and girls separately. The characteristic of each emoji corresponds with type of response being assigned to that particular score. The score from 0 to 5 represents following-

- 0- Yes
- 1- No
- 2- May be
- 3- Sometimes
- 4- All the times

**TARGET AGE –**

This is our modified self-reported scale and targets the children from 06 to 11 year age group.

**ADVANTAGES -**

We have modified the questions for all the parameters considering all the possible scenarios in which child experiences difficulties, pain, discomfort which disrupts their physical function, psychological stability and in turn impact their life social life. Our modified scale addresses the impacts of oral health specific to children and adolescents of 06 to 11 years age group separately for boys and girls. There is total 35 questions distributed in 07 parameters with five questions in each parameter assessing their shortcomings, perplexity which determines the social impacts on children due to their oral issues.

With no scale so far was available covering the social impacts of children in of 06 to11 year age group, as children of this group has different perceptions and elucidation, who are still in age of growth and development, has different psychological thought process then adults. So, the need for modification and formulation of simpler, reliable, feasible and statistically sensitive scale was inescapable.

**Table 1- ORAL HEALTH IMPACT PROFILE (OHIP-35) MODIFIED FOR CHILDREN**

<b>Parameter</b>	<b>Questions</b>
Functional Limitations In Children	<ol style="list-style-type: none"> <li>1. Difficulty in biting the food</li> <li>2. Difficulty in swallowing the food</li> <li>3. Difficulty while grinding/ chewing</li> <li>4. Difficulty in pronouncing particular words</li> <li>5. Difficulty while having hot/ cold food items( including beverages)</li> </ol>
Physical Pain In Children	<ol style="list-style-type: none"> <li>1. Painful to open the mouth</li> <li>2. Painful teeth/ toothache</li> <li>3. Painful/ bleeding/ ulcerated/ swollen gums</li> <li>4. Painful lacerations/ bruises/ cuts/ due to appliance wear and tear</li> <li>5. Traumatic pain due to sports injuries/ accidental falls/ physical abuse</li> </ol>
Psychological discomfort in children	<ol style="list-style-type: none"> <li>1. Anxious</li> <li>2. Fearful</li> <li>3. Anger/ sudden outburst of anger</li> <li>4. Frustration</li> <li>5. Irritation</li> </ol>
Physical Disability in children	<ol style="list-style-type: none"> <li>1. Difficulty in maintaining oral hygiene</li> <li>2. Difficulty in food/ drinking water</li> <li>3. Avoiding hard food &amp; fruits</li> <li>4. Eating only from one side</li> <li>5. Pain in arms/ legs/ general body pain</li> </ol>
Psychological Disability In Children	<ol style="list-style-type: none"> <li>1. Binge eating/ nocturnal eating/ eating during odd hours.</li> <li>2. Disturbed sleep/ interrupted sleep/ sleeping during day hours/ sleeping during odd hours.</li> <li>3. Difficulty to focus.</li> <li>4. Victim of bullying/ Public admonished by teachers.</li> <li>5. Worried.</li> </ol>
Social Disability In Children	<ol style="list-style-type: none"> <li>1. Avoid playing with friends/ neighbours</li> <li>2. Avoid family gatherings/ public gathering /functions</li> <li>3. Avoid going out with parents/elders</li> <li>4. Avoid contact out with teachers/ sports coaches</li> <li>5. Avoid studies/ school homework</li> </ol>
Handicapped in children	<ol style="list-style-type: none"> <li>1. Unable to focus at school/ at home/ at play ground</li> <li>2. Unable to take part in sports activities/ physical training drills at schools</li> <li>3. Unhappy with grades at school/ performance at sports</li> <li>4. Unhappy with school friends &amp; friends near home/ society</li> <li>5. Sudden loss of near &amp; dear ones</li> </ol>

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