

*Original Research Article*

# Changes in Knowledge and Attitude before and after a Health Education Program among Primary School Teachers Regarding Dental Anxiety in Children

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## Abstract

**Introduction** : Children are subjected to primary education from a very young age during which they spend quality time with teachers. Hence assessing the knowledge of teachers, with regards to dental anxiety is an essential aspect for health care providers.

**Purpose** : The purpose of the study was to evaluate the knowledge and awareness status before and after a health education program among primary school teachers regarding dental anxiety in children by way of a questionnaire.

**Methodology** : A total of 214 primary school teachers were approached in Chennai for the study purpose. The idea behind the survey was explained in detail, consent obtained and data collection was done. Statistical analysis was performed using 'Z' test as the data was parametric and quantitative in nature.

**Results** : In the knowledge category, the results showed 70.83% improvement after health education and in the attitude category, it showed 90% improvement.

**Conclusion** : Health education tools play a major role in contributing towards increasing the knowledge and attitude and thus can be implemented on a larger scale.

**Key Words** : Attitude, knowledge, awareness, dental anxiety status, teachers.

## Introduction

Children encounter general dental anxiety since a dental environment is thoroughly a new experience,

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even though the ambience is inviting and child friendly.<sup>1</sup> Children spend most of their prime time in school with their favourite teachers. Teachers can be sought to remove their anxiety and fear with regards to a dental scenario so that we can achieve our target of creating an anxiety free future society.<sup>2</sup> Thus the aim of our study is to assess the knowledge and attitude before and after a health education program among primary school teachers regarding dental anxiety in

children and thereby check for the effectiveness of the program.

### Methodology

The study was done for a duration of 3 months simple random sampling method was used. The study population consisted of 214 participants which was statistically determined. Consent and assent was obtained. Questionnaire was designed, modified and the final version was developed.

**Part 1** contained the Demographic details along with educational background and teaching experience.

**Part 2** contained questions pertaining to knowledge and attitude about dental anxiety in children

Questionnaire was pilot tested on a smaller number of participants which helped us to modify the sequence of questions and the text flow. The questionnaire was distributed among 214 teachers who participated in the study. Data collection and analysis was done.

### Results

**Table 1 In our study** depicts the Gender distribution of the participants among whom there were 81.3% female teachers and 18.7% of male teachers.

**Table 2 In our study** depicts grading of the knowledge level amongst the participants which showed 0-9 % in the poor category, 10-14 % in the average category, 15-19% in the good category and 20-23 in the excellent category.

**Table 3 In our study** depicts grading of the attitude level amongst the participants which showed 0-1 % in the poor category, 2 % in the average category, 3% in the good category and 4% in the excellent category.

**Table 4 In our study** depicts distribution of correct answers regarding dental anxiety in children amongst the participants. Assessment was done to find out if dental anxiety education has to be given or not.. Where dental anxiety education to be given was emphasized, in the pre- education category there were 99% among 211 participants and 99.5 % among 212 participants in the post-education category. Where dental anxiety education to be given was not emphasized, in the pre- education category there were 47.6 % among 102 participants and 97.2 % among 208 participants in the post-education category.

**Table 5 In our study** depicts the **distribution of primary school teachers according to the answers for method of dental anxiety education** amongst the participants which showed 116, with a % of 54.2 in the pamphlet category, 0 in the brochure category and 98 with 45.79% in the AV aids category .

<b>Table 1: Gender distribution</b>	<b>N %</b>
Female	81.3
Male	18.7

<b>Table 2: Grading of knowledge level</b>	
<b>No of correct answers</b>	<b>Interpretation</b>
0-9	Poor
10-14	Average
15-19	Good
20-23	Excellent

<b>Table 3 : Grading of the attitude level</b>	
<b>No of correct answers</b>	<b>Interpretation</b>
0-1	Poor
2	Average
3	Good
4	Excellent

<b>Table 4: Distribution of correct answers regarding dental anxiety in children</b>				
		<b>Pre</b>		<b>Post</b>
	N	%	N	%
Dental anxiety education should be given	211	99	212	99.5
Dental anxiety education should not be given	102	47.6	208	97.2

**Table 5 : Distribution of primary school teachers according to the answers for method of dental anxiety education**

<b>Method of dental anxiety education</b>	<b>Pre</b>	<b>Pre</b>	<b>Post</b>	<b>Post</b>
	N	%	N	%
Using pamphlets	116	54.2	204	95.30
Using brochures	0	0	0	0
Using A-V aids	98	45.79	10	4.67

## Discussion

Children's emotional perspective can be moulded towards right dental attitudes when intervened at an early age before being influenced by peers, friends, parents and teachers. Thereby increasing the knowledge and attitude among primary school teachers would help in the long run which was achieved in our study.

Our study depicted the gender distribution of the participants among whom there were a considerable percentage among males and female teachers achieved.. This is in accordance with similar studies done by Hayward et al <sup>1</sup>, Ayer et al<sup>2</sup> and Mostofsky et al <sup>3</sup>. who suggested the incorporation of gender distribution of participants for assessment. Our study depicts grading of the knowledge level amongst the participants. This is in accordance with similar studies done by Dalley et al <sup>4</sup>, Bowling et al <sup>5</sup> and Newton et al<sup>6</sup>.

Our study depicts grading of the attitude level amongst the participants amongst the various categories. This is in accordance with similar studies done by MA Grath et al<sup>7</sup>, Folayan et al <sup>8</sup> and Corah et al <sup>9</sup>.Our study depicts distribution of correct answers regarding dental anxiety in children amongst the participants. Assessment was done to find out if dental anxiety education has to be given or not.This is in accordance with similar studies done by De Jongh et al <sup>10</sup>, Venham et al <sup>11</sup> and Wong et al <sup>12</sup>.

Our study depicts the distribution of primary school teachers according to the answers for method of dental anxiety education amongst the participants. This is in accordance with similar studies done by Buchanan et al <sup>13,14</sup> et al, Bhat et al <sup>15</sup> and Scarpeli et al <sup>16</sup>.Our study depicts the **distribution of** knowledge of primary school teachers before and after dental anxiety education amongst the participants

Our study depicts the distribution of attitude

of primary school teachers before and after dental anxiety education amongst the participants. This is in accordance with similar studies done by Martins Junior et al <sup>17</sup> et al, Peker et al <sup>18</sup> and Barbosa et al <sup>19</sup> and Pahel et al <sup>20</sup>.

## Conclusion

Our study showed that there was a dearth of information regarding dental anxiety status among children before dental health awareness program which improved tremendously after the program among primary school teachers, which clearly indicates that more such programs can be planned and conducted in a larger scale. Thus it can cater to the needs of the society by way of Out Reach programs in combination with Health Education protocols.

## Implications

1. Our study emphasized the focus areas for removing the stress involved in treating dentally anxious children in an exponential manner.
2. Analytical aspects of the survey will help the researchers to comprehend better.
3. The study design aims to cater to needs of the population at the community level.

**Ethical Clearance:** This study was a short project. Hence IEC could not be obtained, ethical issues were appropriately addressed as follows

1. Anonymity of subjects was ensured.
2. No pressure was exerted on the subjects to participate in the study and participation was completely voluntary.
3. Confidentiality of data was ensured. It was saved in password protected systems which had access only to investigators.

**Declaration of Interests :** The authors declare no conflicts of interest.

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