



## Research Article

# Prevalence of Dental Caries among Children Residing in Muslim Dominated Area of Laheriasarai, Darbhanga

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### Abstract

*Caries is one of the most common diseases of oral cavity; it affects all the age group and equally common among different sex. It is however preventable disease if diagnose early. My present study is undertaken to know the prevalence among 9-12 years old children and reason of it.*

**Objective:** *To assess the prevalence of dental caries among 9-12 years old children residing in Muslim dominated area of laheriasarai, Darbhanga.*

**Material & Method:** *This was the cross-section and survey type study carried out on total 100 student aged 9-12 years. Simple random sampling methodology was used to select the sample. The subject were examined for dental caries and asked about the hygienic habit and socio-demographic characteristics with the help of predesigned questionnaire. Data were analyzed using SPSS.*

**Results:** *100 children participated in the present study. The general prevalence rate of dental caries was found to be 75%. Also the prevalence of dental caries was found higher among children belonging to family having less income as compared to those belonging to high income family.*

**Conclusion:** *Dental caries is the most prevalent chronic disease affecting the human race. Regular dental checkups and practicing routine oral hygiene will help them to lead a healthier life.*

**Keywords:** *Dental caries, Prevalence, Children, Darbhanga.*

### Introduction

Thorough out the history of man, disease have come and diseases have disappeared. For most of the major diseases, it has been possible to clearly identify the means how the disease was brought under control. Such means may include nation-wide or even global vaccination programmes, change in lifestyles with the improved nutrition and non-contaminated drinking water. For other diseases, it may be more difficult to explain the reasons for a change. This is particularly true for

diseases with the multifactorial background like dental caries. Dental caries is an infectious disease where the hard tissues of the teeth have been damaged, creating cavities in the tooth, which ultimately causes pain which affects normal activities like speech, swallowing, eating etc<sup>1</sup>. The dental caries varies greatly among population, it varies among sex, age, demography, diet and oral hygiene practice and inside oral cavity as well as different on different surface of tooth<sup>2</sup>. Dental caries is preventable however it is one of the most

common chronic diseases of children of age group 6 – 11 years and adolescents of age group of 12-19 years<sup>3</sup>. Dental caries can be prevented on large scale by the various preventive measures taken time to time<sup>4</sup>.

In 1940, it was observed that the prevalence of caries in India was 55.5% and in 1960 it was 68%. Overall the prevalence and severity of dental caries has increased in urban and cosmopolitan population since last two decades<sup>5</sup>. The survey was conducted in 2004 throughout the India in which prevalence of dental caries was found to be 51.9% in 5 year old children, 53.8% in 12 year old children and 63.1% in 15 year old teenager. Finally the report was concluded that water fluoridation should be started to solve this national crisis in dental caries<sup>6</sup>. The study conducted among school going children in Asia it was found to be 60% to 90% however there were certain declined in prevalence in developing countries due to various life style modification and preventive measure taken<sup>7</sup>.

The Laheriasarai comes under Darbhanga town in the state of Bihar. Since, no study showing the prevalence of caries has been done yet in this region and to recommend various preventive measures. The present study was undertaken to assess the prevalence of dental caries among 9-12 years old children of laheriasaria, Darbhanga.

### Methodology

The study was conducted in Muslim dominated area of laheriasarai, Darbhanga. Total 100 students aged 9-12 years were assess for the presence of dental caries as well as enquire about the hygienic habit and frequency of brushing daily with the help of predesigned questionnaire. The socio-demographic factor is also taken into consideration.

### Inclusion criteria

- 1) Students aged between 9-12 years
- 2) Presence of dental caries.
- 3) Children who were resident of laheriasarai.

### Exclusion criteria

- 1) Children above the age of 9-12 years

- 2) Those suffering from systemic illness.
- 3) Those having orthodontics bracket and with Severe extrinsic stains on their teeth.

The study population consists of 100 students which were conducted in the month of June and August 2017. Simple random sampling was done. The study was done by interviewing the students using a predesigned questionnaire and an examination of the condition of the teeth was done by the Paedodontist. Tongue depressor and dental mirror were used for screening the children. Data was obtained and statistical analysis was performed using SPSS version 16.0.

### Results

In our study 100 children of different background were participated. In among 100 children, prevalence of dental caries was found to be 60% in the children aged 9-10 years and 75% in 11-12 years old child. The prevalence rate was found to be higher in children belonging to low income family as compared to those belonging to high income family.

### Discussion

Dental caries is a major health problem which affects 60-90% of school going children.<sup>7</sup> In the present study the prevalence of dental caries was found to be 60% in the children aged 9-10 years and 75% in 11-12 years old child of laheriasarai, Darbhanga. The study by Sahito et al<sup>8</sup> reported the prevalence of dental caries to be 60% in 8-10 years and 80% in 11-12 years which is almost similar to the finding of present study. The study conducted by Bhatia et al reported the prevalence of caries to be 51.46% among school going children aged 3-15years which is very close to the present study.<sup>9</sup>

The study conducted by Ahmad et al among children aged 5-18years and found that the prevalence of dental caries was 30.9% which is far below as compared to the present study. This may due to different socio-economic and demographic variables.<sup>10</sup>

The present study showed that the prevalence of dental caries was found to be higher among children coming from low income family as compared to those belonging to high income family.

People belonging to low income family lives in unhealthy conditions due to monetary issues and illiteracy and does not have sterile practice which leads to dental caries. On the other hand people belonging to high income family lives in much better conditions. On further enquiring about personal hygiene, it was found that the children who brushes twice a day had less dental caries as compared to those who brushes once daily or not every day.

In Kenya that brushing habit it was found that brushing habit has no significant effect on caries which is contradictory to present study. However, in another study it was found that 24% children who brushes more than once a day had less prevalence of caries<sup>11</sup>

Dental awareness among children can be prompted for prevention of this condition.

### Conclusion

Dental caries was found to be the major health issue among children of laheriasarai, darbhanga. There is a need to aware about oral hygiene practice and dietary habits among general population through mass and media. During this study it was observed that parents education is equally important in terms of maintaining good oral health. Regular screening should be done for early diagnosis and prompt treatment.

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