

Introduction

Dental caries remains the principal disease affecting pre-school children. It is the most prevalent unmet health care need of children.

At the point of cavitations, caries experience is irreversible and cumulative and prevention is both preferable and possible.

Studies have shown that not all children are at equal risk for developing caries. A high risk group of children with primary tooth caries can be identified and characterized, it would be useful to determine whether preventive measures should be applied to all children, or targeted for those with elevated risk. For this we need to have a baseline data.

Hence an attempt has been made to collect baseline data by assessing dental caries experience of private kindergarten schoolchildren

The aim of the present study was to determine the caries free proportions, and caries experience in private kindergarten schoolchildren.

Materials and Methods

A cross sectional survey of the 5- and 6-year-old kindergarten schoolchildren (n = 66) was conducted in two private kindergartens in Kedah state.

Two trained and calibrated dentists examined the children.

Dental caries was scored using WHO diagnostic criteria. Each child was examined while seated on a portable chair.

Torch light and mouth mirror were used for the examination.

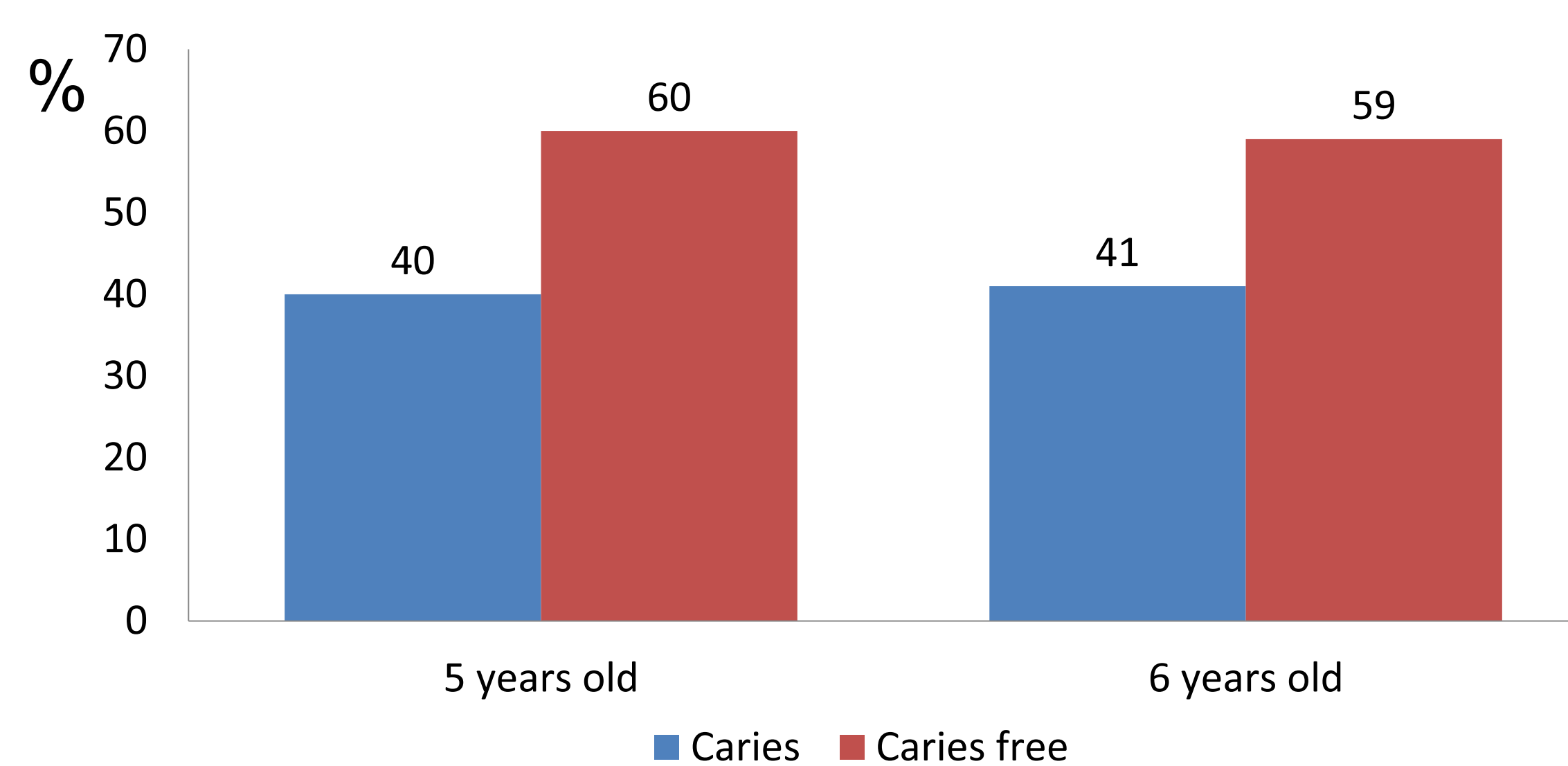
The probe was used sparingly on doubtful surfaces. In case of any doubt the tooth was marked sound. No radiographs were taken.

Results

Profile of participants

	Gender		Ethnicity		
	male	female	Malay	Indian	Chinese
5 years old (24)	9	15	11	2	11
6 years old (42)	23	19	24	4	14
Total (66)	32	34	35	6	25

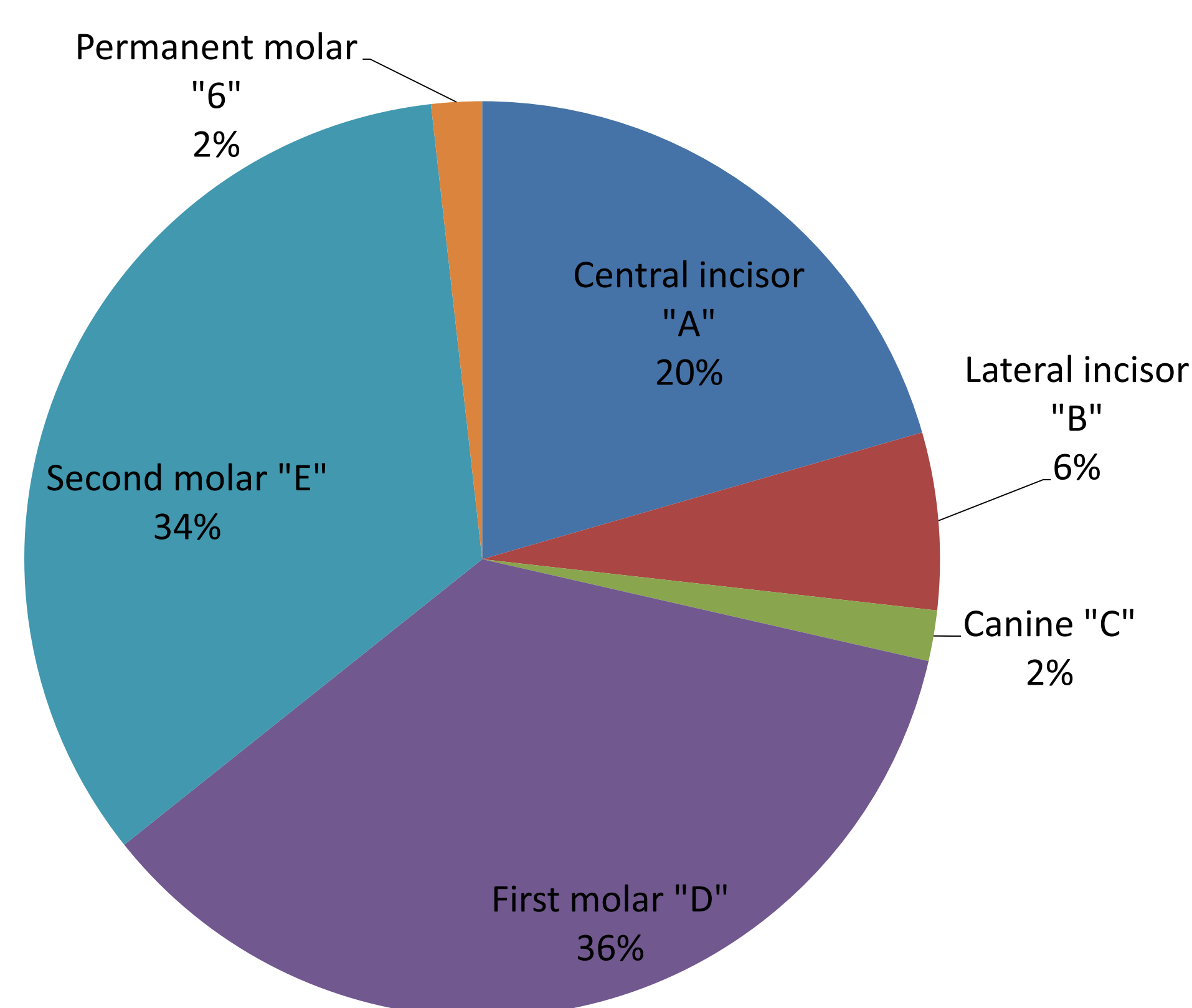
Percentage of caries and caries free 5 & 6 year old children



Decayed teeth quadrant wise

6	e	d	c	b	a	a	b	c	d	e	6
-	10	7	1	3	9	10	3	-	9	8	-
6	e	d	c	b	a	a	b	c	d	e	6
1	10	10	1	1	2	2	-	-	14	10	1

Pie chart of most affected teeth



The percentage of 5 and 6-year-old children who were caries free (dft = 0) was 60% and 59% respectively.

The corresponding mean dft for 5- and 6-year-olds were 1.56 and 1.92.

The decayed score was the major component in the mean scores. 10.06% of the children had severe caries affecting more than 5 teeth.

Deciduous first molar (36%) was the highly affected teeth followed by deciduous second molar (34%). One case of rampant caries was found.

Conclusion

The present study provided important information regarding the change in magnitude and severity of dental caries prevalence in preschool children.

Though it was relatively a small population, percentage of caries free preschool children were better compared to NOHPS 2005 (23.8%).

Dental health topics ought to be included in the schools curriculum in kindergarten along with training of schoolteachers to provide basic dental health education.

The preschool teachers can play an important role in building up positive oral health habits in children. Parents should be educated about the need for earlier and regular dental attendance.

They should be made aware of the brushing methods, daily use of an accepted fluoride dentifrice, usage of pit and fissure sealants and the importance of topical fluoride application for children.

References

- Koloway B, Kailis DG. Caries, gingivitis and oral hygiene in urban and rural pre-school children in Indonesia. Community Dent Oral Epidemiol 1992;20(3):157-8
- Al-Mohammadi SM, Rugg-Gunn AJ, Butler TJ. Caries prevalence in boys aged 2, 4, and 6 years according to socio-economic status in Riyadh, Saudi Arabia. Community Dent Oral Epidemiol 1997;25(2):184-6
- World Health Organization. Geneva. Oral Health Surveys Basic Methods. 4th ed. 1997
- Shenoy R, Sequeira PS, Rao A, Rao A, Pai D. Dental caries experience of pre-school children in Mangalore, India, Journal of Nepal Dental Association (2009), Vol. 10, No. 1, Jan.-Jun., 25-30
- Al-Mutawa SA, Shyama M, Al-Duwairi Y, Soparkar P. Dental caries experience of Kuwaiti kindergarten schoolchildren, Community Dent Health. 2010 Dec;27(4):213-7.