

I AM, I'll Be
 happy
 educated
 active
 healthy



June 2009 | N° 9

“Brush, Brush, Brush, I’m Brushing My Teeth”* ... Do practices match the recommendations?¹

GINETTE VEILLEUX, MARTIN GÉNÉREUX, JEAN-MARC BRODEUR and JACQUES DUROCHER, Agence de la santé et des services sociaux de Montréal²

DELPHINE PROVENÇAL and VALERIU DUMITRU, Institut de la statistique du Québec

Brushing teeth at least twice a day with a fluoride toothpaste is an effective measure for preventing tooth decay.³ It is a habit that should be established from when the first tooth appears, a time when parental involvement is vital, since toddlers are not capable of brushing their teeth by themselves.

The Québec Longitudinal Study of Child Development (QLSCD 1998-2010) is providing a means of monitoring the development of a number of lifestyle habits among children born in the province at the end of the 1990s, some of which are related to oral health. The data presented here were collected from parents of the study children when the latter were between the ages of 17 months and 6 years, then when they were approximately 8 years of age. The data provide a portrait of the age at which brushing began, the participation of an adult in this activity, and daily frequency.

At what age does brushing teeth begin?

Professional Association recommendations:^{4,5,6} Begin brushing children’s teeth as soon as they appear in the mouth.

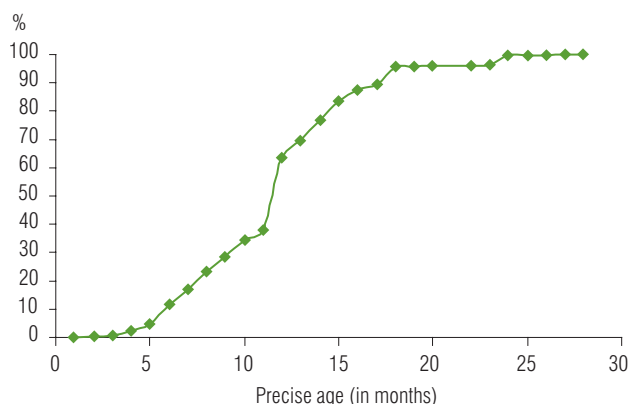
Although no question addressed the appearance of the first set of teeth, parents were asked to provide the precise age of the child, in months, when his/her teeth were first brushed. As shown in Figure 1, approximately 12% of children had had their teeth brushed by the age of 6 months or earlier. This proportion rapidly increased to 64% at the age of one year, reaching 96% at the age of 18 months. At the age of 24 months, brushing teeth was well under way for almost all children (99%).⁷

Who brushes the teeth?

Professional Association recommendations:^{4,5,6} Parents should help their children brush their teeth until they develop the dexterity required to do it themselves. They should continue to monitor their children’s brushing after this.

Around the age of 17 months, approximately 44% of children were having their teeth brushed by an adult. In 29% of cases, an adult

Figure 1
Cumulative proportions of children¹ whose teeth had already been brushed for the first time, by age, Québec, 1999, 2000



1. Children born in 1997-1998 in Québec.
 Source: Institut de la statistique du Québec, QLSCD 1998-2010.

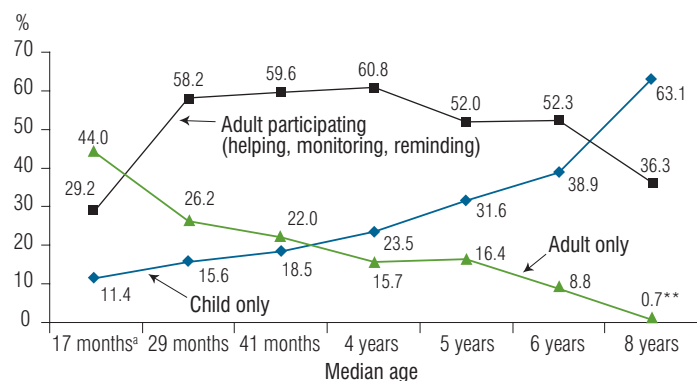
was present to help or supervise, while 11% of children usually brushed their teeth themselves (Figure 2).

Around the age of 29 months, an adult brushing the child’s teeth was already much less a common occurrence (26%), and the proportion decreased over the years to 9% at the age of 6 years. Approximately 60% of children at 29 months brushed their teeth most often with an adult present to help, supervise or remind, up to the age of 4 years inclusively. This proportion decreased to 50% at the ages of 5 and 6 years, and to 36% by the age of 8 years. At this latter age, 63% were brushing their teeth themselves.

* Translation of a well-known children’s song in Québec. Courtesy of Télé-Québec.

1. The authors would like to thank the following people for their contribution at various stages of the project: Marie Olivier, Michel Lévy and Daniel Picard, researchers at the Direction de santé publique of the Agence de la santé et des services sociaux de Montréal; Michel Fournier, Emanuelle Huberdeau and Richard Goudreau, research assistants at the Direction de santé publique of the Agence de la santé et des services sociaux de Montréal; Amélie Ducharme, research officer at the ISQ.
 2. Direction de santé publique.
 3. V.C.C. MARINHO, J.P.T. HIGGINS, S. LOGAN and A. SHEHAM (2003). “Fluoride toothpastes for preventing dental caries in children and adolescents,” *Cochrane Database of Systematic Reviews*, 1, CD002278.
 4. ORDRE DES DENTISTES DU QUÉBEC (2009). *Preventive Dentistry for Children, Fluoride*, [Online]: www.ordredesdentistesduquebec.qc.ca/index_en_p.htm?section=public&orm=faq_en.html&m=faq (page accessed June 23, 2009).
 5. CANADIAN DENTAL ASSOCIATION (2009). *Cleaning Teeth* [Online]: www.cda-adc.ca/en/oral_health/cfy/dental_care_children/cleaning.asp (page accessed June 23, 2009).
 6. ORDRE DES HYGIÉNISTES DENTAIRES DU QUÉBEC (2009). *Conseils pour nourrissons, Conseils pour enfants*, [Online]: www.ohdq.com/Sante/Conseils.aspx (page accessed May 27, 2009).
 7. From the age of 29 months, the number of children who had never had their teeth brushed was negligible (less than 1%). These cases were therefore excluded from the analyses.

Figure 2
Proportion of children¹ by the person most often involved in brushing the teeth and by age, Québec, 1999 to 2004, 2006



a The percentage of children at the age of 17 months who had never brushed their teeth or had their teeth brushed (15%) is not shown.
 ** Coefficient of variation higher than 25%; imprecise estimate for information purposes only.
 1. Children born in 1997-1998 in Québec.
 Source: Institut de la statistique du Québec, QLSCD 1998-2010.

How many times a day?

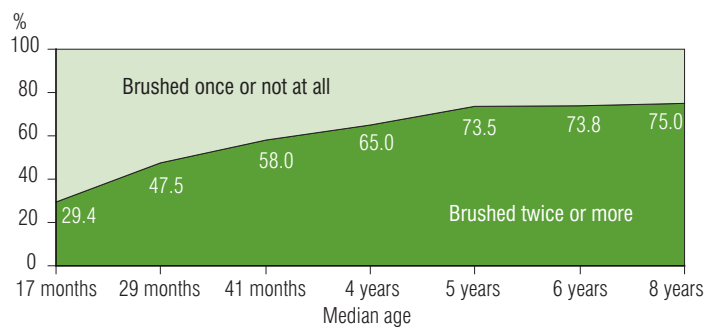
Professional Association recommendation:^{4,5,6} Brush teeth at least twice a day with a fluoride toothpaste.

At 17 months of age, only 29% of children had had their teeth brushed or had brushed their teeth at least twice the day before the interview (Figure 3). This proportion increased to 48% at 29 months, 58% at 41 months and 65% at the age of 4 years, reaching 74% at 5 years and maintaining this level at the ages of 6 and 8 years.

At the age of 8 years, more children had had their teeth brushed twice or more the day before the interview if their mother had at least a high school diploma (78% v. 62%), if they lived in an urban versus a rural area (77% v. 68%) or if they had fewer than two brothers or sisters (78% v. 70%). In addition, children whose family income had never been below the poverty line⁸ since their birth were more likely to have had their teeth

8. According to the low-income cutoff defined by Statistics Canada.

Figure 3
Distribution of children¹ by frequency of brushing teeth the day before the interview and by age, Québec, 1999 to 2004, 2006



1. Children born in 1997-1998 in Québec.
 Source: Institut de la statistique du Québec, QLSCD 1998-2010.

brushed at least twice the day before the interview than those whose family had been living at some point below the poverty line (78% v. 71%) (data not shown).

The data revealed that 44% of children at 17 months were using a toothpaste. This proportion was 91% at 29 months and 99% when the children were 5 years of age (data not shown). The presence of fluoride in the toothpaste was not specified during the interview, but since virtually all brands of toothpaste contain the substance, it can be inferred that fluoride toothpaste was most often used.

Conclusions?

For a sizeable proportion of children born in Québec at the end of the 1990s, teeth brushing practices do not seem to correspond to the recommendations. Indeed, brushing the teeth had not yet begun at the age of one year for 36% of the children. Moreover, at the ages of 5, 6 and 8 years, close to a quarter of children had not brushed their teeth at least twice on the day before the interview. These findings, combined with more in-depth analyses of QLSCD data, can contribute to improving oral health promotion strategies designed for parents and children, notably by targeting groups less likely to adopt healthy practices.

About the survey

The Québec Longitudinal Study of Child Development (QLSCD 1998-2010) is being conducted by the Institut de la statistique du Québec (ISQ) in collaboration with various partners. It is funded by the Ministère de la Santé et des Services sociaux, the Ministère de la Famille et des Aînés, the Fondation Lucie et André Chagnon, and the ISQ. The main goal of this study is to understand pathways and to identify the factors that, during early childhood, contribute to social adjustment and success in school.

More information about the survey may be found on the QLSCD web site, also known as “I am, I’ll be”, at www.jesuisjeserai.stat.gouv.qc.ca.

To access the study microdata, please contact the Research Data Access Centre of the ISQ (Centre d’accès aux données de recherche de l’ISQ – CADRISQ) at www.stat.gouv.qc.ca/cadrisq, or call 514 343-2299.

This fact sheet, translated by James Lawler, is also available in French under the title “« Brosse, brosse, brosse, j’m brosse les dents » ... les pratiques correspondent-elles aux recommandations?”

This bulletin was designed by Direction des enquêtes longitudinales et sociales.

For further information, please contact:

Hélène Desrosiers
 Direction des enquêtes longitudinales et sociales
 Institut de la statistique du Québec
 1200, avenue McGill College, 5th floor
 Montréal (Québec) H3B 4J8
 Telephone: 514 873-4749, ext. 6110
 Fax: 514 864-9919
 Email: contactsante@stat.gouv.qc.ca

Legal deposit
 Library and Archives Canada
 Bibliothèque et Archives nationales du Québec
 3rd Quarter 2009
 ISSN 1913-4851 (printed version)
 ISSN 1913-486X (on-line version)
 © Gouvernement du Québec,
 Institut de la statistique du Québec, 2007

The PDF version of this bulletin is available on the web site of the ISQ at: www.stat.gouv.qc.ca

