

# Perceived Importance of Child's Oral Health, Oral Health Practice and Oral Healthcare Utilization among Mothers

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**Abstract:** This National Health and Morbidity Survey of Maternal and Child Health (NHMS 2016: Maternal and Child) aimed to determine mother's perception of importance of their young children's oral healthcare, practice of oral health and dental utilization of their child. All mothers with children aged 0-59 months, aged 15-49 years and last childbirth less than 2 years prior to the survey in the selected Living Quarters (LQs) were invited to participate in this survey. A face-to-face interview by trained research assistants using a structured questionnaire through mobile device application was used during the data collection period from mid-February until end of May 2016. About 26.8% (95% CI: 21.55 – 32.76) of mothers reported it is very important for them to look after their child's teeth, 72.8% (95% CI: 66.87 – 78.06) reported it is important, while 0.3% (95% CI: 0.16 – 0.55) did not think looking after their child's teeth is important. About 74.0% (95% CI: 71.51 – 76.37) of mothers reported they cleaned/brushed their child's teeth or supervised their child's tooth brushing daily, while 19.0% (95% CI: 17.12 – 21.02) reported they had only done so once a while. A low percentage of mothers (7.0%, 95% CI: 5.74 – 8.49) reported they had never ever cleaned/brushed their child's teeth or supervised their child's tooth brushing. About 73.3% (95% CI: 69.61 – 76.71) of mothers reported they had never brought their child for a dental visit (dental check-up/dental treatment) before. About 38.3% (95% CI: 34.53 – 42.17) of mothers opined that they need to bring their child for their first dental visit before their child was two years of age, 27.5% (95% CI: 24.67 – 30.42) when their child was two to three years old and 25.3% (95% CI: 22.89 – 27.89) when their child was four to five years old. A further 9.0% (95% CI: 6.44 – 12.34) of mothers reported not knowing when they should bring their child for their first dental visit. The findings highlight the need to need to promote greater awareness of the role of mothers in maintaining good oral health of their young children. Oral health promotion advice for mothers need to include good oral hygiene habits for the very young child as well as bringing children for their first dental visit before the age of two years.

**Keywords:** mother's perception, young children oral healthcare, practice of oral health, dental utilization.

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## I. INTRODUCTION

Milk or 'baby teeth' are important for many reasons. Not only are they needed to help children speak clearly and chew naturally, milk teeth are needed for the proper eruption of permanent teeth [1]. Tooth decay can happen at any age and it is important that healthy oral hygiene habits be started from birth. The baby's gum should be wiped with a clean moist gauze or wash cloth every day. Brushing should commence as soon as the first teeth appear [2]. Up to 18 months of age, it is recommended that the baby's teeth be brushed with plain water once a day after their last feed. From 18 months to 2 years, it is recommended that parents begin teaching their child to brush their own teeth using a pea-size amount of toothpaste. From 2 to 8 years, young children should brush their teeth twice a day and parental supervision may be needed to help brush their teeth clean [2].

It is recommended that parents bring their child for their first dental before the child is two years of age. Regular checkup by the dentist is also advised to help diagnose and prevent tooth decay as early as possible [3]. Taking into consideration the importance of beginning oral healthcare for young children from as early as possible during childhood, the Oral Health Programme in the MOH has accorded high priority for oral healthcare of toddlers (children below five years old) throughout the country. This programme started as a pilot project in Sarawak in 1991 and subsequently expanded throughout the nation on an ad-hoc basis in the following years. The findings of the National Oral Health Survey of Preschool Children in 2005 showed as high as 76.2% of 5-year-old preschool children had dental caries experience [4]. Following this, in 2008, a national guideline was produced to create oral health awareness among parents, child care providers and health personnel [5].

This survey aimed to obtain numerous community-based data including the immunisation coverage, infant feeding status, child development, autism and the common morbidities of a child, while for mothers, this survey will focus on antenatal coverage, birth history, postnatal care, pre-pregnancy care and their child's dental care. This paper would only presented the findings on mother's perception on importance of oral health, practice of oral health and dental utilization of their child.

## II. METHODOLOGY

This National Health and Morbidity Survey of Maternal and Child Health (NHMS 2016: Maternal and Child) was approved by the Medical Research Ethics Committee (MREC) of the Ministry of Health Malaysia in 2016. This was a cross-sectional survey involving mothers who aged 15-49, with last childbirth less than 2 year prior to the survey and had children aged 0-59 months in the selected Living Quarters (LQs). The LQs were randomly selected proportionately within each district in all states in Malaysia. There were 16,000 randomly selected LQs nationwide with estimated 48,000 respondents. A face-to-face interview by trained research assistants using a structured questionnaires through mobile device application was used during the data collection period from mid-February until end of May 2016. The prevalence estimates and 95% confidence intervals (CI) were generated for descriptive statistics of mother's perception on importance oral health, practice of oral health and dental utilization of their child. The SPSS Statistical Software version 20 was used for statistical analysis.

## III. RESULTS

A total of 10,140 living quarters were successfully interviewed (response rate of 85.6%). Of 11,388 household, about 89.0% responded with 16,966 children involved and 15,179 mothers of children surveyed were interviewed. This was weighted to represent an estimated population of 2,491,770 mothers in Malaysia.

About 26.8% (95% CI: 21.55 – 32.76) of mothers reported it is very important for them to look after their child's teeth, 72.8% (95% CI: 66.87 – 78.06) reported it is important, while 0.3% (95% CI: 0.16 – 0.55) did not think looking after their child's teeth is important. A very small proportion (0.1%, 95% CI: 0.06 – 0.17) of mothers reported not knowing the importance of looking after their child's teeth. Except for other ethnic groups, significantly more "Other Bumiputera" ethnicity of mothers (39.5%, 95% CI: 30.02 – 49.93) than "Malays" (23.3%, 95% CI: 17.98 – 29.60), thought that looking after their child's teeth is very important (**Table 1**).

About 74.0% (95% CI: 71.51 – 76.37) of mothers reported they cleaned/brushed their child's teeth or supervised their child's tooth brushing daily, while 19.0% (95% CI: 17.12 – 21.02) reported they had only done so once a while. A low percentage of mothers (7.0%, 95% CI: 5.74 – 8.49) reported they had never ever cleaned/brushed their child's teeth or supervised their child's tooth brushing. The prevalence of mothers who reported not having cleaned/brushed their child's teeth or supervised their child's tooth brushing every day was significantly higher among those in 20 – 29 age group range (9.3% - 9.5%) as compared to those aged between 35 – 39 years (4.8%, 95% CI: 3.52 – 6.53). Differentials with respect to the other sociodemographic variables were relatively non-significant (**Table 2**).

About 73% (95% CI: 69.61 – 76.71) of mothers reported they had never brought their child for a dental visit (dental check-up/dental treatment) before. The prevalence was significantly higher among mothers with "student" occupation status as compared to those of who work in the public/private sector, "self-employed" and the housewife (ranging from 62% - 75%). Differentials with respect to the other sociodemographic variables were relatively non-significant (**Table 3**).

About 38.3% (95% CI: 34.53 – 42.17) of mothers opined that they need to bring their child for their first dental visit before their child was two years old, 27.5% (95% CI: 24.67 – 30.42) when their child was two to three years old and 25.3% (95% CI: 22.89 – 27.89) when their child was four to five years old. A further 9.0% (95% CI: 6.44 – 12.34) of mothers reported not knowing when they should bring their child for their first dental visit. Significantly, more mothers of

“Chinese” ethnicity (14.5%, 95% CI: 9.72 – 21.01) reported not knowing the right timing of a child’s first dental visit compared to the “Indians” ethnicity (3.8%, 95% CI: 2.21 – 6.36). Differentials with respect to the other sociodemographic variables were relatively non-significant (**Table 4**).

#### IV. DISCUSSION

Only 1 in 4 (26.8%) of mothers claimed it is very important for them to look after their child’s teeth, while a majority (72.8%) of them admitted look after their child’s teeth is important. This finding is in agreement with other studies which reported that looking after primary or milk teeth is important [6],[7]. Notably, more mothers of ‘other Bumiputera’ (39.5%) ethnicity thought that looking after their child’s teeth is very important as compared to the Malays. This could be resulted from positive reinforcement of primary teeth and their treatment by the dental professionals to child care givers. More than two-third (74%) of mothers claimed they cleaned/brushed their child’s teeth or supervised their child’s tooth brushing daily, while 19.0% reported they had only done so once a while. Teeth cleaning is related more to social norms than to considerations of the health benefits arising from it [8]. This acceptance of tooth cleaning is positive, but emphasis should be given on commencing tooth cleaning as soon as the first milk tooth erupts. These findings were in correlation with a study conducted by Akpabio et al. [9] and Gussy et al. [10]. A study conducted in Kaunas City by Vaitkeviciene et al. [11] reported that very few parents started to brush their children's teeth when the first tooth erupted. It was found that children who start brushing at a later age have a higher prevalence of Early Childhood Caries [12]. It was noted that in this survey, young mothers of age 20 – 29 years were more likely to have not cleaned/brushed their child’s teeth (9.3% - 9.5%) as compared to those who aged between 35 – 39 years (4.8%). A study cited most parents agreed that children should be guided and supervised by parents while brushing their teeth [6]. This may be due to the fact that in a majority of tasks like bathing or dressing, parents assist their young ones, as they do not believe these activities can be completed by their child properly.

There were 7 in 10 (73%) of mothers who reported that they had never brought their child for dental check-up/dental treatment. This findings similar to a study conducted by Abduljalil HS and Abuaffan AH [13] which showed that 6 in 10 mothers of the children [67.1%] had never visited a dentist before. A study done by Moulana et. al [14] and Chan et. al [15] suggested that, the earlier a child visits to dentist, the greater would be the likelihood of being caries-free. In addition, mothers neglected the dental care for milk teeth as they believed it would gradually be replaced with the permanent teeth.

This study showed that 1 in 3 of mothers (38.3%) opined that they need to bring their child for their first dental visit before their child was two years of age. A similar proportion of mothers opined they need to bring their child for their first dental visit at two to three years old (27.5%) and four to five years old (25.3%). According to AAPD, the first dental visit was the first milk tooth eruption time and no later than twelve months of age [16]. In this survey, a substantial percentage of mothers were not aware about the timing of child’s first dental visit.

#### V. CONCLUSION

The findings of this study showed that parents were aware about the importance of milk teeth. However, a large number of mothers were not concern in bringing their child for dental visit. More than half of mothers were unaware of the correct timing for a child’s first dental examination. Anticipatory guidance and oral health promotion advice for mothers to include good oral hygiene habits for the very young child as well as bringing children for their first dental visit before the age of two years is important for good oral health of young children.

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**Table 1: Perception on importance of looking after children's oral health**

Sociodemographic Characteristics	Very Important				Don't Know			
	Estimated Population	Prevalence (%)	95% CI		Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper			Lower	Upper
<b>MALAYSIA</b>	667,390	26.8	21.55	32.76	2,426	0.1	0.06	0.17
<b>Age of mother (year)</b>								
15-19	5,310	20.1	11.53	32.75	24	0.1	0.01	0.69
20-24	54,480	18.7	13.94	24.50	1,210	0.4	0.15	1.12
25-29	194,243	25.8	20.20	32.22	437	0.1	0.04	0.08
30-34	248,725	28.9	22.44	36.29	147	0.0	0.00	0.07
35-39	117,881	28.8	21.93	36.87	461	0.1	0.04	0.33
40-44	17,884	20.4	14.39	28.13	147	0.2	0.05	0.62
45-49	1,797	19.2	7.40	41.27	0	0.0	0.00	0.00
50 and above	0	0.0	0.00	0.00	0	0.0	0.00	0.00
<b>Ethnicity of mother</b>								
Malay	352,278	23.3	17.98	29.60	901	0.1	0.03	0.13
Chinese	94,026	25.9	16.43	38.27	384	0.1	0.01	0.78
Indians	32,887	28.5	20.14	38.74	0	0.0	0.00	0.00
Other Bumiputera	137,308	39.5	30.02	49.93	65	0.0	0.00	0.14
Others	24,000	23.5	14.47	35.81	1,076	1.1	0.43	2.55
<b>Citizenship of mother</b>								
Malaysian citizen	615,878	26.4	21.09	32.52	2,087	0.1	0.05	0.17
Permanent Resident	1,254	14.4	5.69	31.90	0	0.0	0.00	0.00
Non-Malaysian	23,367	23.4	14.96	34.64	338	0.3	0.24	0.47

Sociodemographic Characteristics	Very Important				Don't Know			
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			Lower	Upper			Lower	Upper
<b>MALAYSIA</b>	667,390	26.8	21.55	32.76	2,426	0.1	0.06	0.17
<b>Marital status of mother</b>								
Married/Cohabiting	631,111	26.4	21.08	32.48	2,364	0.1	0.06	0.18
Single/Separated/Divorced/Widow	9,388	19.4	11.56	30.68	62	0.1	0.02	0.88
<b>Education of mother</b>								
No Formal	7,056	15.9	8.48	27.69	396	0.9	0.19	4.12
Primary	62,577	24.2	18.42	30.99	877	0.3	0.11	1.00
Secondary	305,641	24.2	19.46	29.69	1,014	0.1	0.03	0.19
Higher	264,744	30.4	22.95	39.01	138	0.0	0.00	0.06
<b>Occupation of mother</b>								
Public Sector	158,446	33.0	25.71	41.18	65	0.0	0.00	0.10
Private Sector	168,088	27.5	19.43	37.28	398	0.1	0.01	0.45
Self-employed	47,317	27.2	17.91	39.08	258	0.1	0.05	0.43
Housewife	255,996	22.6	18.52	27.22	1,705	0.2	0.08	0.29
Unemployed	6,743	29.2	18.45	42.80	0	0.0	0.00	0.00
Student	3,456	24.1	8.23	52.86	0	0.0	0.00	0.00
<b>Household income/per capita income</b>								
Less than RM1000	47,010	25.3	18.48	33.66	462	0.2	0.09	0.72
RM1000 – RM1999	99,391	22.5	18.07	27.60	1,375	0.3	0.15	0.63
RM2000 – RM2999	96,268	25.1	19.87	31.25	103	0.0	0.01	0.13
RM3000 – RM3999	79,878	24.0	18.90	29.90	36	0.0	0.00	0.08
RM4000 – RM4999	61,865	26.8	18.33	37.30	0	0.0	0.00	0.00
RM5000 and above	280,687	31.3	23.19	40.85	449	0.1	0.01	0.29

Note: Some cells have respondent count < 30. Results should be interpreted with caution.

**Table 1: Perception on importance of looking after children's oral health (cont.)**

Sociodemographic Characteristics	Very Important				Don't Know			
	Estimated Population	Prevalence (%)	95% CI		Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper			Lower	Upper
<b>MALAYSIA</b>	667,390	26.8	21.55	32.76	2,426	0.1	0.06	0.17
<b>Age of mother (year)</b>								
15-19	5,310	20.1	11.53	32.75	24	0.1	0.01	0.69
20-24	54,480	18.7	13.94	24.50	1,210	0.4	0.15	1.12
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35-39	117,881	28.8	21.93	36.87	461	0.1	0.04	0.33
40-44	17,884	20.4	14.39	28.13	147	0.2	0.05	0.62
45-49	1,797	19.2	7.40	41.27	0	0.0	0.00	0.00
50 and above	0	0.0	0.00	0.00	0	0.0	0.00	0.00
<b>Ethnicity of mother</b>								
Malay	352,278	23.3	17.98	29.60	901	0.1	0.03	0.13
Chinese	94,026	25.9	16.43	38.27	384	0.1	0.01	0.78
Indians	32,887	28.5	20.14	38.74	0	0.0	0.00	0.00
Other Bumiputera	137,308	39.5	30.02	49.93	65	0.0	0.00	0.14
Others	24,000	23.5	14.47	35.81	1,076	1.1	0.43	2.55
<b>Citizenship of mother</b>								
Malaysian citizen	615,878	26.4	21.09	32.52	2,087	0.1	0.05	0.17
Permanent Resident	1,254	14.4	5.69	31.90	0	0.0	0.00	0.00
Non-Malaysian	23,367	23.4	14.96	34.64	338	0.3	0.24	0.47
<b>Marital status of mother</b>								
Married/Cohabiting	631,111	26.4	21.08	32.48	2,364	0.1	0.06	0.18
Single/Separated/Divorced/Widow	9,388	19.4	11.56	30.68	62	0.1	0.02	0.88
<b>Education of mother</b>								
No Formal	7,056	15.9	8.48	27.69	396	0.9	0.19	4.12
Primary	62,577	24.2	18.42	30.99	877	0.3	0.11	1.00

Sociodemographic Characteristics	Very Important				Don't Know			
	Estimated Population	Prevalence (%)	95% CI		Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper			Lower	Upper
<b>MALAYSIA</b>	667,390	26.8	21.55	32.76	2,426	0.1	0.06	0.17
Secondary	305,641	24.2	19.46	29.69	1,014	0.1	0.03	0.19
Higher	264,744	30.4	22.95	39.01	138	0.0	0.00	0.06
<b>Occupation of mother</b>								
Public Sector	158,446	33.0	25.71	41.18	65	0.0	0.00	0.10
Private Sector	168,088	27.5	19.43	37.28	398	0.1	0.01	0.45
Self-employed	47,317	27.2	17.91	39.08	258	0.1	0.05	0.43
Housewife	255,996	22.6	18.52	27.22	1,705	0.2	0.08	0.29
Unemployed	6,743	29.2	18.45	42.80	0	0.0	0.00	0.00
Student	3,456	24.1	8.23	52.86	0	0.0	0.00	0.00
<b>Household income/per capita income</b>								
Less than RM1000	47,010	25.3	18.48	33.66	462	0.2	0.09	0.72
RM1000 – RM1999	99,391	22.5	18.07	27.60	1,375	0.3	0.15	0.63
RM2000 – RM2999	96,268	25.1	19.87	31.25	103	0.0	0.01	0.13
RM3000 – RM3999	79,878	24.0	18.90	29.90	36	0.0	0.00	0.08
RM4000 – RM4999	61,865	26.8	18.33	37.30	0	0.0	0.00	0.00
RM5000 and above	280,687	31.3	23.19	40.85	449	0.1	0.01	0.29

Note: Some cells have respondent count < 30. Results should be interpreted with caution.

**Table 2: Frequency of cleaning/brushing child's teeth or supervision of child's tooth brushing**

Sociodemographic Characteristics	Every day				Once in a few days			
	Estimated Population	Prevalence (%)	95% CI		Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper			Lower	Upper
<b>MALAYSIA</b>	1,594,832	74.0	71.51	76.37	409,344	19.0	17.12	21.02
<b>Age of mother (year)</b>								
15-19	14,321	64.9	50.74	76.80	3,953	17.9	9.98	30.04
20-24	163,222	70.1	64.87	74.88	47,351	20.3	16.09	25.38
25-29	433,803	71.3	67.95	74.47	118,001	19.4	16.77	22.34
30-34	576,729	75.0	71.01	78.54	150,223	19.5	16.63	22.78
35-39	298,466	78.1	73.90	81.87	65,132	17.1	13.83	20.84
40-44	64,049	74.2	68.05	79.49	17,767	20.6	15.47	26.84
45-49	6,301	67.2	41.45	85.52	2,569	27.4	9.05	58.82
50 and above	0	0.0	0.00	0.00	303	98.0	74.85	99.88
<b>Ethnicity of mother</b>								
Malay	940,191	72.8	70.02	75.48	262,387	20.3	18.18	22.66
Chinese	225,296	70.2	63.09	76.43	70,499	22.0	16.69	28.34
Indians	72,857	74.5	61.12	84.42	11,318	11.6	8.42	15.69
Other Bumiputera	248,339	81.1	76.86	84.79	43,491	14.2	10.84	18.42
Others	70,384	74.1	67.50	79.78	17,605	18.5	13.96	24.19
<b>Citizenship of mother</b>								
Malaysian citizen	1,480,653	73.7	70.94	76.20	389,369	19.4	17.42	21.48
Permanent Resident	5,549	72.8	48.74	88.25	1,000	13.1	5.75	27.19
Non-Malaysian	70,865	76.4	69.59	82.02	14,930	16.1	11.79	21.57
<b>Marital status of mother</b>								
Married/Cohabiting	1,523,907	73.8	71.27	76.14	396,545	19.2	17.33	21.22
Single/Separated/Divorced/Widow	33,160	73.4	61.11	82.83	8,754	19.4	10.99	31.85
<b>Education of mother</b>								
No Formal	30,306	72.8	62.32	81.23	7,747	18.6	11.54	28.59
Primary	160,020	67.0	62.26	71.33	61,427	25.7	21.09	30.93
Secondary	801,137	74.1	71.11	76.90	195,473	18.1	15.87	20.53
Higher	562,984	75.5	70.21	80.08	140,209	18.8	15.32	22.85
<b>Occupation of mother</b>								
Public Sector	332,420	78.9	74.56	82.74	67,257	16.0	13.01	19.45
Private Sector	369,225	72.0	67.72	75.87	108,840	21.2	17.33	25.71

Sociodemographic Characteristics	Every day				Once in a few days			
	Estimated Population	Prevalence (%)	95% CI		Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper			Lower	Upper
<b>MALAYSIA</b>	1,594,832	74.0	71.51	76.37	409,344	19.0	17.12	21.02
Self-employed	116,760	72.3	64.98	78.51	33,035	20.4	15.49	26.48
Housewife	718,524	72.9	70.27	75.43	189,366	19.2	17.01	21.65
Unemployed	12,505	65.1	41.85	82.87	4,824	25.1	11.75	45.78
Student	5,191	68.6	41.62	87.02	1,552	20.5	8.59	41.48
<b>Household income/per capita income</b>								
Less than RM1000	114,723	68.9	62.68	74.51	40,215	24.2	18.89	30.33
RM1000 – RM1999	268,759	69.9	65.46	73.97	85,738	22.3	19.07	25.89
RM2000 – RM2999	238,630	71.1	65.28	76.27	67,091	20.0	16.44	24.07
RM3000 – RM3999	223,272	78.4	73.26	82.73	44,952	15.8	12.65	19.50
RM4000 – RM4999	157,125	77.9	68.76	84.91	33,439	16.6	12.40	21.80
RM5000 and above	579,895	76.0	72.54	79.23	135,525	17.8	15.14	20.75

Note: Some cells have respondent count < 30. Results should be interpreted with caution.

**Table 2: Frequency of cleaning/brushing child's teeth or supervision of child's tooth brushing (cont.)**

Sociodemographic Characteristics	Never			
	Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper
<b>MALAYSIA</b>	150,656	7.0	5.74	8.49
<b>Age of mother (year)</b>				
15-19	3,802	17.2	8.80	30.97
20-24	22,224	9.5	6.74	13.35
25-29	56,430	9.3	6.90	12.37
30-34	42,409	5.5	4.26	7.11
35-39	18,353	4.8	3.52	6.53
40-44	4,522	5.2	2.69	9.94
45-49	512	5.5	0.96	25.60
50 and above	6	2.0	0.12	25.15
<b>Ethnicity of mother</b>				
Malay	88,227	6.8	5.29	8.79
Chinese	25,184	7.8	5.61	10.88
Indians	13,650	14.0	6.47	27.53
Other Bumiputera	14,218	4.6	3.02	7.09
Others	6,980	7.3	4.65	11.42
<b>Citizenship of mother</b>				
Malaysian citizen	140,178	7.0	5.64	8.59
Permanent Resident	1,076	14.1	2.58	50.42
Non-Malaysian	7,005	7.5	4.49	12.42
<b>Marital status of mother</b>				
Married/Cohabiting	144,972	7.0	5.72	8.58
Single/Separated/Divorced/Widow	3,287	7.3	3.10	16.11
<b>Education of mother</b>				
No Formal	3,582	8.6	4.37	16.23
Primary	17,564	7.3	5.46	9.83
Secondary	84,448	7.8	6.17	9.84
Higher	42,646	5.7	4.00	8.10
<b>Occupation of mother</b>				
Public Sector	21,426	5.1	3.04	8.40
Private Sector	34,917	6.8	5.34	8.64
Self-employed	11,810	7.3	3.47	14.73
Housewife	77,324	7.8	6.26	9.80
Unemployed	1,878	9.8	2.96	27.76
Student	822	10.9	1.51	49.18
<b>Household income/per capita income</b>				

Sociodemographic Characteristics	Never			
	Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper
<b>MALAYSIA</b>	150,656	7.0	5.74	8.49
Less than RM1000	11,560	6.9	4.67	10.20
RM1000 – RM1999	30,065	7.8	5.48	11.04
RM2000 – RM2999	29,966	8.9	5.79	13.53
RM3000 – RM3999	16,681	5.9	3.36	10.02
RM4000 – RM4999	11,210	5.6	2.33	12.69
RM5000 and above	47,159	6.2	4.74	8.03

Note: Some cells have respondent count < 30. Results should be interpreted with caution.

**Table 3: Prevalence of mothers who had ever brought their child for a dental visit**

Sociodemographic Characteristics	Yes, had ever brought child for a dental visit				No, had never brought child for a dental visit			
	Estimated Population	Prevalence (%)	95% CI		Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper			Lower	Upper
<b>MALAYSIA</b>	619,234	26.7	23.29	30.39	1,700,782	73.3	69.61	76.71
<b>Age of mother (year)</b>								
15-19	6,225	26.3	12.16	47.81	17,483	73.7	52.19	87.84
20-24	56,130	21.1	16.18	26.96	210,301	78.9	73.04	83.82
25-29	160,213	23.4	20.42	26.75	523,358	76.6	73.25	79.58
30-34	246,300	30.4	25.20	36.14	564,054	69.6	63.86	74.80
35-39	115,621	29.4	25.35	33.71	278,226	70.6	66.29	74.65
40-44	23,041	26.6	21.06	33.01	63,558	73.4	66.99	78.94
45-49	1,136	12.1	5.57	24.35	8,246	87.9	75.65	94.43
50 and above	303	98.0	74.85	99.88	6	2.0	0.12	25.15
<b>Ethnicity of mother</b>								
Malay	390,120	28.0	24.24	32.01	1,004,933	72.0	67.99	75.76
Chinese	76,123	21.9	16.27	28.73	272,014	78.1	71.27	83.73
Indians	35,120	32.3	19.75	48.07	73,572	67.7	51.93	80.25
Other Bumiputera	88,103	27.1	22.00	32.95	236,668	72.9	67.05	78.00
Others	19,502	20.0	14.40	26.99	78,223	80.0	73.01	85.60
<b>Citizenship of mother</b>								
Malaysian citizen	582,621	26.8	23.44	30.56	1,587,443	73.2	69.44	76.56
Permanent Resident	2,005	26.3	11.36	49.82	5,620	73.7	50.18	88.64
Non-Malaysian	24,342	25.2	17.35	35.04	72,346	74.8	64.96	82.65
<b>Marital status of mother</b>								
Married/Cohabiting	597,942	26.8	23.32	30.68	1,629,813	73.2	69.32	76.68
Single/Separated/Divorced/Widow	11,027	23.7	16.62	32.50	35,597	76.3	67.50	83.38
<b>Education of mother</b>								
No Formal	7,613	17.9	9.91	30.05	35,022	82.1	69.95	90.09
Primary	63,723	25.6	19.97	32.07	185,655	74.4	67.93	80.03
Secondary	302,223	26.1	22.88	29.51	857,431	73.9	70.49	77.12
Higher	234,700	28.6	23.26	34.69	584,924	71.4	65.31	76.74
<b>Occupation of mother</b>								
Public Sector	151,353	33.9	30.10	37.89	295,266	66.1	62.11	69.90
Private Sector	119,999	21.3	16.22	27.50	442,848	78.7	72.50	83.78
Self-employed	43,850	26.7	20.86	33.40	120,590	73.3	66.60	79.14
Housewife	289,427	27.2	24.02	30.72	773,006	72.8	69.28	75.98
Unemployed	2,534	11.6	5.15	24.09	19,306	88.4	75.91	94.85
Student	477	3.6	1.62	7.82	12,772	96.4	92.18	98.38
<b>Household income/per capita income</b>								
Less than RM1000	46,405	26.9	21.37	33.34	125,874	73.1	66.66	78.63
RM1000 – RM1999	113,568	27.4	23.61	31.57	300,728	72.6	68.43	76.39
RM2000 – RM2999	105,489	29.2	25.63	33.02	255,947	70.8	66.98	74.37
RM3000 – RM3999	96,166	32.0	26.70	37.74	204,666	68.0	62.26	73.30
RM4000 – RM4999	61,340	28.4	22.79	34.81	154,480	71.6	65.19	77.21
RM5000 and above	194,102	23.2	18.26	29.06	641,625	76.8	70.94	81.74

Note: Some cells have respondent count < 30. Results should be interpreted with caution.

Table 4: Opinion on timing of child's first dental check-up

Sociodemographic Characteristics	Before 2 years old				2 - 3 years old			
	Estimated Population	Prevalence (%)	95% CI		Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper			Lower	Upper
<b>MALAYSIA</b>	953,737	38.3	34.53	42.17	684,122	27.5	24.67	30.42
<b>Age of mother (year)</b>								
15-19	11,483	43.5	30.56	57.44	7,252	27.5	16.66	41.82
20-24	106,914	36.6	28.49	45.47	84,260	28.8	23.41	34.90
25-29	287,549	38.1	33.13	43.40	205,399	27.2	23.30	31.57
30-34	331,974	38.5	34.28	42.97	225,656	26.2	22.77	29.93
35-39	159,256	39.0	33.75	44.41	121,181	29.6	25.77	33.82
40-44	32,747	37.4	30.68	44.57	22,054	25.2	19.10	32.38
45-49	2,898	30.9	14.90	53.29	1,617	17.2	8.56	31.65
50 and above	303	98.0	74.85	99.88	6	2.0	0.12	25.15
<b>Ethnicity of mother</b>								
Malay	603,782	39.9	36.49	43.44	413,145	27.3	24.75	30.03
Chinese	118,762	32.7	25.40	40.85	98,874	27.2	20.60	34.95
Indians	49,532	43.0	32.72	53.88	32,977	28.6	21.98	36.32
Other Bumiputera	121,634	35.0	25.66	45.72	101,232	29.2	22.15	37.31
Others	39,413	38.7	29.02	49.27	21,374	21.0	13.96	30.25
<b>Citizenship of mother</b>								
Malaysian citizen	892,028	38.3	34.60	42.04	644,682	27.6	24.86	30.61
Permanent Resident	2,992	34.4	12.70	65.30	2,663	30.6	10.18	63.13
Non-Malaysian	38,102	38.1	27.94	49.48	20,257	20.3	14.27	27.97
<b>Marital status of mother</b>								
Married/Cohabiting	914,229	38.2	34.45	42.13	656,925	27.5	24.67	30.44
Single/Separated/Divorced/Widow	18,894	39.0	27.10	52.43	10,677	22.1	12.81	35.27
<b>Education of mother</b>								
No Formal	11,155	25.2	15.96	37.34	12,106	27.3	17.88	39.35
Primary	100,742	38.9	33.42	44.63	65,118	25.1	20.45	30.47
Secondary	490,841	38.9	34.66	43.23	340,678	27.0	24.28	29.84
Higher	329,281	37.8	33.48	42.32	248,335	28.5	24.30	33.12
<b>Occupation of mother</b>								
Public Sector	209,984	43.7	39.40	48.14	138,210	28.8	25.08	32.78
Private Sector	212,565	34.7	29.63	40.21	174,282	28.5	24.27	33.09
Self-employed	67,812	39.0	30.34	48.44	40,842	23.5	18.17	29.82
Housewife	428,803	37.8	33.62	42.19	304,607	26.9	23.58	30.41
Unemployed	9,401	40.6	20.73	64.20	4,503	19.5	11.12	31.84
Student	2,234	15.6	5.67	36.09	4,582	31.9	12.08	61.52
<b>Household income/per capita income</b>								
Less than RM1000	68,968	37.2	31.03	43.81	45,754	24.7	20.51	29.37
RM1000 – RM1999	175,435	39.6	34.52	44.99	126,950	28.7	23.81	34.11
RM2000 – RM2999	145,863	38.1	32.86	43.60	106,080	27.7	24.04	31.68
RM3000 – RM3999	138,887	41.7	36.23	47.36	89,241	26.8	21.80	32.43
RM4000 – RM4999	85,804	37.1	30.30	44.48	65,577	28.4	23.50	33.79
RM5000 and above	331,074	37.0	32.07	42.17	242,803	27.1	23.25	31.37

Note: Some cells have respondent count < 30. Results should be interpreted with caution.

Table 4: Opinion on timing of child's first dental check-up (cont.)

Sociodemographic Characteristics	4 - 5 years old				Don't know			
	Estimated Population	Prevalence (%)	95% CI		Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper			Lower	Upper
<b>MALAYSIA</b>	630,712	25.3	22.89	27.89	223,347	9.0	6.44	12.34
<b>Age of mother (year)</b>								
15-19	3,771	14.3	6.98	27.06	3,875	14.7	5.80	32.51
20-24	72,731	24.9	19.75	30.81	28,513	9.8	6.07	15.30
25-29	204,801	27.2	23.76	30.85	56,311	7.5	5.35	10.34
30-34	222,758	25.9	22.12	29.98	81,101	9.4	6.65	13.16
35-39	87,484	21.4	17.64	25.70	40,933	10.0	5.82	16.68

Sociodemographic Characteristics	4 - 5 years old				Don't know			
	Estimated Population	Prevalence (%)	95% CI		Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper			Lower	Upper
<b>MALAYSIA</b>	630,712	25.3	22.89	27.89	223,347	9.0	6.44	12.34
40-44	24,936	28.5	22.29	35.53	7,909	9.0	6.15	13.05
45-49	4,226	45.0	27.35	64.08	641	6.8	1.42	27.25
50 and above	0	0.0	0.00	0.00	0	0.0	0.00	0.00
<b>Ethnicity of mother</b>								
Malay	385,586	25.5	22.64	28.57	110,095	7.3	5.38	9.78
Chinese	93,387	25.7	21.27	30.65	52,651	14.5	9.72	21.01
Indians	28,399	24.6	17.61	33.33	4,349	3.8	2.21	6.36
Other Bumiputera	84,397	24.3	18.15	31.74	39,960	11.5	5.01	24.28
Others	28,936	28.4	23.24	34.16	12,229	12.0	7.44	18.78
<b>Citizenship of mother</b>								
Malaysian citizen	589,497	25.3	22.76	27.97	205,863	8.8	6.24	12.35
Permanent Resident	1,951	22.4	5.07	60.95	1,104	12.7	2.86	41.69
Non-Malaysian	29,258	29.3	21.44	38.58	12,317	12.3	7.06	20.64
<b>Marital status of mother</b>								
Married/Cohabiting	612,536	25.6	23.20	28.17	208,611	8.7	6.34	11.88
Single/Separated/Divorced/Widow	8,170	16.9	8.70	30.19	10,672	22.0	10.97	39.35
<b>Education of mother</b>								
No Formal	14,511	32.7	19.97	48.72	6,542	14.8	7.95	25.78
Primary	74,939	28.9	23.34	35.22	18,317	7.1	4.33	11.33
Secondary	311,698	24.7	21.95	27.63	119,817	9.5	6.36	13.91
Higher	218,972	25.1	21.38	29.31	74,579	8.6	5.96	12.14
<b>Occupation of mother</b>								
Public Sector	104,710	21.8	18.81	25.12	27,426	5.7	3.23	9.90
Private Sector	156,807	25.6	21.69	29.98	68,401	11.2	8.26	14.96
Self-employed	43,305	24.9	20.53	29.88	21,848	12.6	6.05	24.30
Housewife	302,951	26.7	23.45	30.25	97,726	8.6	5.99	12.25
Unemployed	7,901	34.2	13.40	63.50	1,325	5.7	2.16	14.34
Student	4,981	34.7	10.78	70.03	2,558	17.8	4.48	50.09
<b>Household income/per capita income</b>								
Less than RM1000	54,075	29.2	22.86	36.38	16,630	9.0	4.49	17.13
RM1000 – RM1999	108,756	24.6	20.40	29.29	31,431	7.1	4.87	10.24
RM2000 – RM2999	95,560	24.9	20.41	30.12	35,506	9.3	6.22	13.60
RM3000 – RM3999	81,003	24.3	20.47	28.61	24,049	7.2	4.56	11.23
RM4000 – RM4999	60,144	26.0	22.04	30.43	19,659	8.5	4.46	15.61
RM5000 and above	228,551	25.5	22.10	29.28	92,951	10.4	7.13	14.88

Note: Some cells have respondent count < 30. Results should be interpreted with caution.