

Prevalence and correlates of poor oral hygiene among school attending 13-15 year adolescents in Morocco

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Madam, daily brushing of teeth contributes towards good oral as well as general health.¹⁻³ Association of poor oral hygiene with poverty, tobacco use, age, and gender has been reported.¹⁻⁴ To determine these factors association with self-reported frequency of brushing/cleaning teeth in the past 30-days in Moroccan students aged 13-15 years, 2010 Global School-Based Health Survey (GSHS)

all students in the 1st, 2nd, and 3rd Prep. Schools; the details of the survey and data are available, and were accessed from the CDC's GSHS website.⁵

Design-based analysis with STATA-13 was done using simple, and multiple logistic regressions; factors found to be statistically significant at $p < 0.05$ level on simple

Table: Respondent's demographic attributes, and associations with poor oral hygiene in bivariate and multivariate analyses^φ.

Factor	Total N* (%) [*]	Crude ORS (95% CI) ^{***}	Adjusted ORS (95% CI) ^{***}
Age (years)		1.06 (0.95, 1.18) ^{§§}	N/A
13	648 (31.8)		
14	764 (38.4)		
15	585 (29.8)		
Sex			
Male	1016 (54.5)	1.44 (1.16, 1.78)	1.40 (1.10, 1.76)
Female	968 (45.5)	1	1
During the past 30 days went hungry because there was not enough food in home			
Never or rarely	1500 (76.6)	1	1
Sometimes/Most of the time/ Always	462 (23.4)	1.46 (1.06, 2.0)	1.39 (1.04, 1.86)
During the past 30 days smoked cigarettes or used other tobacco products			
Zero days	1806 (90.5)	1	1
One or more days	184 (9.5)	1.50 (1.09, 2.07)	1.28 (0.93, 1.77) ^{§§}

Totals vary across different factors owing to missing information by factor.

^φPoor Oral Hygiene was defined as either not cleaning or brushing teeth or doing so less than once per day in the past 30 days.

* Unweighted frequencies

** Weighted percent

*** Confidence Interval

[§]Odds Ratio for the association between not cleaning/brushing teeth or doing so less than once every day, during the past 30 days

N/A Not Applicable as factor was not included in the final multiple logistic regression model

^{§§} Not statistically significant at $p < 0.05$ level.

data for Morocco was used. GSHS-Morocco was conducted by the Moroccan national authorities, Centers for Disease Control and Prevention (USA), and the World Health Organization, using two-stage cluster sample design to produce nationally representative estimates for

logistic regression were included in the multiple logistic regression model. Responses to question "During the past 30 days, how many times per day did you usually clean or brush your teeth?" were used to determine oral hygiene status. Not cleaning or brushing teeth or doing so less than once per day in the past 30 days was defined as poor oral hygiene. Overall prevalence of poor oral hygiene, was 31.9% [95% confidence interval (CI): 26.9%, 37.4%] ($n = 1972$). In males the prevalence was 35.4%

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(95% CI: 29.4%, 41.8%), while among females the prevalence was 27.6% (95% CI: 23.3%, 32.2%). Table provides the respondent's demographic, socioeconomic status (determined by going hungry due to unavailability of food in home), and tobacco use; associations with poor oral hygiene in bivariate and multivariate analyses. Age was not found to be statistically significant in the simple logistic regression model, and was not included in the multiple logistic regression model. Final model included sex, tobacco use, and socioeconomic status. However, tobacco use was not found to be statistically significant in the final multiple logistic regression model. Goodness-of-fit test result concluded that this model was a good fit for the data.

Prevalence of brushing/cleaning teeth once, twice, and three or more times per day in the past 30 days was 20.5% (95% CI: 18.3%, 22.8%), 17.7% (95% CI: 15.1, 20.6%), and 29.9% (95% CI: 26.7, 33.4%), respectively. Results from the GSHS-Morocco suggest the need for

targeting health education campaigns specifically directed towards adolescents from low socioeconomic strata of society and males.

References

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