

**DENTAL CARIES AND RELATED FACTORS**  
**IN THE FIRST AND SECOND ACADEMIC YEAR MEDICAL**  
**STUDENTS IN THAIBINH MEDICAL UNIVERSITY, VIETNAM**



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A Thesis Submitted in Partial Fulfillment of the Requirements  
for the Degree of Master of Public Health Program in Health Systems Development  
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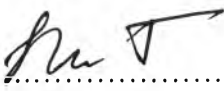
By Pham Thi My Hanh

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Thesis Advisor Robert Sedgwick Chapman, M.D., M.P.H.


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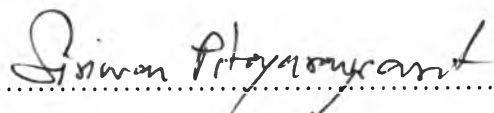
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A population based cross-sectional analytical study was conducted among 365 first- and second- year medical students in Thaibinh Medical University, Vietnam. The study had two main purposes: first to describe prevalence of dental caries by using the decayed, missing and filled teeth (DMFT) index, identify oral hygiene practice, fluoride supplements, eating habit and perception on oral health problem among these students; second to characterize associations between these factors and dental caries. Data were collected in January 2008 by using a structured questionnaire and dental clinical examination. All students in 9 academic units (classes) randomly selected from the list of 11 units were invited to take part in the study. Frequencies, percentages, means, and standard deviations were used to describe the data. To assess associations between dependent and independent variables, non-parametric statistics (Chi-square tests, Spearman's correlations, Mann-Whitney tests and Kruskal-Wallis tests) were used.

The prevalence of dental caries ( $DMFT \geq 1$ ) was 70.4 and the mean DMFT was  $2.28 \pm 2.18$ . Mean filled teeth marked low (only  $0.005 \pm 0.46$ ). There was only limited prevalence of ever visiting a dentist (56.7%) and a very small prevalence of visiting for dental checkup (13.5%). All the students brushed their teeth every day and most brushed twice or more per day (83.5%). Just above 50% of participants had ever used one type of fluoride supplement, not including fluoridated toothpaste, and 53.6% stopped using such supplements before the study. No significant association was seen between dental caries and fluoride supplements. The study revealed good eating habit among this population; with most frequent food intake was healthy food. Significant associations were found between dental caries experience and increased intake of unhealthy foods, especially sweetened milk, gel and chocolate. Perception on oral health problem in terms of pain, chewing, bad odor, tooth damage, tooth color, smiling, communication, and school absence were 57.1%, 35.5%, 17.2%, 9.9%, 9.3%, 6.5% and 4.5% respectively. A significant positive association was found between perceived tooth damage and dental caries experience.

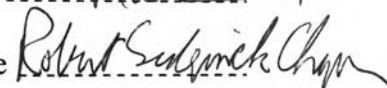
Study findings indicate a need for more education on oral health promotion, especially regarding tooth brushing schedule and reduction of unhealthy food consumption. Regular dental check-ups and early caries treatment are also needed to improve dental health status of this population. Time relationships between dental caries occurrence and perceived dental health-related problems should also be further characterized.

Field of Study Heath System Development

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**LIST OF ABBREVIATION**

WHO	World Health Organization
DMFT	Decayed, Missing and Filled Teeth