

探討社會人口學變項預測 7-12 歲學童口腔衛生與牙齦炎狀況：橫斷性研究

Socio-demographic determinants as predictors of oral hygiene status and gingivitis in schoolchildren aged 7-12 years old: A cross-sectional study

作者群：Saeed Bashirian¹, Shabnam Seyedzadeh-Sabounchi², Samane Shirahmadi^{3*}, AliReza Soltanian⁴, Akram Karimi-shahanjarini³, Farshid Vahdatinia⁵

摘要

研究目的

牙齦炎及口腔衛生不佳為國小學生最常見的口腔疾病。研究顯示，社會人口學變項、口腔衛生不佳以及牙齦炎與牙周病有關，然而，關於伊朗孩童的牙齦炎和口腔衛生狀況，資訊仍十分有限。因此，本研究欲探討伊朗哈馬丹地區，7 到 12 歲學童的牙齦炎和口腔衛生狀況，以及這些狀況與社會人口學變項的關聯。

研究方法

本研究為橫斷式研究，選取了 988 位 7 至 12 歲的國小學童，以簡化口腔衛生指數 (Simplified Oral Hygiene Index, OHI-S) 測量學童的口腔衛生狀況，以社區牙周指數 (Community Periodontal Index, CPI) 評估牙齦出血與牙結石的情況。本研究根據 CPI 標準化測量，評估牙齦出血與牙結石情形，口腔衛生情況則根據牙結石及牙菌斑的狀況分為良好、尚可及不佳。此外，利用問卷了解研究對象之年齡、性別、居住地、過去一年的牙痛經驗以及父母親的教育程度、職業、是否監督學童刷牙。蒐集到之數據使用描述性統計和邏輯迴歸進行分析。

研究結果

本研究中，664 位學童 (65.20%) 口腔狀況良好，341 位 (34.50%) 口腔狀況尚可，3 位 (0.30%) 口腔狀況不佳。CPI 的檢測結果顯示，639 位學童 (64.07%) 牙周組織為健康，320 位 (32.40%) 有牙齦出血的情形，29 位 (2.9%) 則有牙結石。12 歲的年齡組中，較多男孩有牙齦出血以及口腔衛生不佳的狀況。CPI 和 OHI-S 分數的結果顯示，超過半數的國小學童擁有健康的牙齦和牙周組織 (64.1%) 以及良好的口腔衛生狀況 (65.2%)。

本研究發現，學童在 CPI 測量結果，口腔中有牙結石狀況和學童年齡與居住地有顯著相關，牙齦出血狀況和性別、年齡、居住地及母親職業也有顯著相關。此外，年齡以及母親職業與計畫口腔為生指數 OHI-S 指標有顯著相關。

結論

綜合而言，哈馬丹郊區學校的學童牙周健康狀況比都市學校學童差。由於國小學童的性別、學校所在地區和母親職業與口腔衛生指標有顯著相關，因此在規劃學校的口腔健康計畫時，應將這些因素納入考慮。

Socio-demographic determinants as predictors of oral hygiene status and gingivitis in schoolchildren aged 7-12 years old: A cross-sectional study

Saeed Bashirian¹, Shabnam Seyedzadeh-Sabounchi², Samane Shirahmadi^{ID3*}, AliReza Soltanian⁴, Akram Karimi-shahanjarini³, Farshid Vahdatinia⁵

Abstract

Objective

Gingivitis and poor oral hygiene status are the most prevalent oral diseases among primary school students. Poor oral hygiene status, gingivitis and socio-demographic determinants have been shown to be associated with periodontal diseases. There is limited information on the gingivitis and oral hygiene status among Iranian children. In the present study, the status of gingivitis, oral hygiene status, and their association with socio-demographic determinants among schoolchildren aged 7–12 years old in Hamadan were investigated.

Methods

In this cross-sectional study, 988 primary school students aged 7–12 years old were selected. The oral hygiene status was measured through Simplified Oral Hygiene Index (OHI-S) and Community Periodontal Index (CPI) was used to evaluate gingival bleeding and calculus. CPI was measured using a standardized protocol to investigate gum bleeding and calculus. The oral hygiene was classified as good, fair or poor based on calculus and debris measurements. Age, gender, educational level, occupation and residence district of parents, dental pain experience in the last year and whether parents supervised their children while brushing were assessed by the questionnaires. The collected data were analyzed using descriptive statistics and logistic regression analysis.

Results

The oral hygiene status was good in 644 students (65.20%), fair in 341 (34.50%) and poor in three (0.30%). Moreover, the results of CPI depicted that 639 students (64.07%) had healthy periodontium, 320 (32.40%) had periodontal bleeding and 29 (2.9%) were with calculus.

Higher percentage of the boys in the age group of 12 years old had periodontal bleeding and fewer good oral hygiene. The results of CPI and OHI-S scores depicted that more than half of the primary school students had healthy gums and periodontium (64.1%) and good oral hygiene status (65.2%).

There were significant statistical associations between age and residence district with calculus measured by the CPI, also between gender, age, residence district, and mother's occupation with the gingival bleeding measured by the CPI. Furthermore, age and mother's occupation were significantly associated with OHI-S index.

Conclusions

In general, the periodontal health status is poorer in students attending suburban schools compared to those in urban schools in Hamadan. Since there are significant associations between gender, school districts and mother's occupation with oral hygiene index among schoolchildren in primary schools, considering them in schools' oral health program design might be useful.

Reference

Bashirian, S., Seyedzadeh-Sabounchi, S., Shirahmadi, S., Soltanian, A. R., Karimi-shahanjarini, A., & Vahdatinia, F. (2018). Socio-demographic determinants as predictors of oral hygiene status and gingivitis in schoolchildren aged 7-12 years old: A cross-sectional study. *PloS one*, 13(12), e0208886.