Evaluating the Factors That Influence Caries Reduction During Pregnancy

Authors: Mimoza Canga, Irene Malagnino, Vergjini Mulo, Alketa Qafmolla, Vito Antonio Malagnino

Abstract: Background: Dental caries is the most common dental disease and pregnancy represents a special process of physical, hormonal and metabolic changes in pregnant women, which is accompanied by an imbalance in the oral cavity. Objective: The objective of this study is to evaluate caries reduction after dental visits, the scaling of teeth, fluoridated water, brushing of the teeth and using fluoride toothpaste before and during pregnancy. Materials and methods: This study was conducted in the time period March 2018- September 2021, the age range of the participants was: 18-41 years old. The sample taken under observation was composed of 84 pregnant women. The questionnaire included the demographic characteristics of the sample, such as age, women's education level was primary, secondary, and higher education. Based on women's education level, our analysis found that 25.9% of pregnant women had completed primary education, 35.2% of them had secondary education and 38.9% of pregnant women had higher education. The descriptive and analytical research analysis is formulated as a longitudinal study. Statistical analysis was performed using IBM SPSS Statistics 23.0. The significance level (α) was set at 0.05, whereas P-value and analysis of variance (ANOVA) were used to analyze the data. Results: In the present study, it was observed that there is a strong relationship between dental visits and the scaling of the teeth with the value of P' .0001. While the number of teeth with caries before pregnancy and fluoridated water have a P-value=0.002. If we compare the same factor with the number of teeth with dental caries during pregnancy, the correlation is P-value = 0.0001. The number of teeth with caries before pregnancy and carbohydrates consumption has a strong relation with P-value=0.05. According to the present research, the number of teeth with dental caries before pregnancy in relation to brushing the teeth has a P-value 60.05. Furthermore, in the actual research, it was established that using fluoride toothpaste doesn't affect the number of teeth with caries before pregnancy with a P-value = .314. Conclusion: According to the results of the present study performed in Albania, it was found out that the periodical dental visits, scaling of the teeth, fluoridated water, brushing of the teeth influenced caries reduction before and during pregnancy. In comparison, the usage of fluoride toothpaste did not have any effect on dental caries reduction in the same time period. The recommendations are as follows: maintaining oral hygiene, using fluoridated water and brushing the teeth regularly. Healthcare providers should inform pregnant women about the importance of oral health and the implementation of measures to manage dental caries.

Keywords: brushing of the teeth, dental visits, dental scaling, fluoridated water, pregnancy

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