Effect of Nursing Intervention on Oral Health Knowledge, Attitude, and Health Behaviors among Pregnant Women

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Abstract

Aim: This study aimed to evaluate the effect of nursing intervention on oral health knowledge, attitude, and health behaviors among pregnant women. Design: A quasi-experimental design was utilized. Sample: A purposive sample of 111 pregnant women was recruited according to inclusion criteria. The sample was allocated to study and control groups (44 women in each group). Setting: The study was conducted at obstetric s and gynecology outpatient clinic affiliated to Benha University Hospital. Tools of data collection: 1) a structured interviewing questionnaire which consisted of three parts: demographic characteristics, obstetric history, and pregnant women’s knowledge regarding oral health. 2) Pregnant women’s attitude towards oral health questionnaire. 3) Pregnant women’s oral health behaviors sheet. Results: The majority of both groups had poor knowledge and negative attitude regarding oral health. In addition, there were no significant differences in behaviors scores between both groups (P > 0.05) before intervention. However, one month after intervention, 140.8% of the study group had good knowledge compared with 8.0% of the control group, and 81.0% of the study group had positive attitude and only 6.0% of the control group. The health behaviors scores were significantly higher in the study group than the control (P < 0.01). Conclusion: There is positive effect of nursing intervention in improving the pregnant women’s knowledge, attitude as well as health behaviors regarding oral health. Recommendations: Provision of oral health education for pregnant women during antenatal care in order to highlight the importance of good oral health.

Keywords: attitude, behaviors, knowledge, nursing intervention, oral health, pregnant
Introduction

Pregnancy is a natural process that may create some changes in different body parts including the oral cavity. During pregnancy, changes in the oral cavity can be linked to periodontal disease, which includes gingivitis and periodontitis [1,2]. The World Health Organization (WHO) has defined oral health as “a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal disease, tooth decay and loss, and other diseases that affect the oral cavity” [3].

In spite of considerable improvement in the field of oral health throughout the world, oral health problems still persist both in developed and developing countries [4]. [5] Reported that pregnancy gingivitis is common beginning in the second or third month of pregnancy that increases in severity throughout the duration of pregnancy. Pregnancy gingivitis affects about ½ to ⅔ of all pregnant women. Approximately ⅓ to ⅔ of pregnant women suffer from dental caries in developing countries. Pregnant women are about ⅗ times more likely to suffer from dental caries than other women.

Several studies have suggested a positive correlation between presence of periodontal disease and risks of preterm birth, low birth weight, miscarriage, preterm labor, and fetal death [3,4,5]. Adverse pregnancy complications include pre-eclampsia, ulcerations of gingival tissue, pregnancy granuloma and tooth erosion. Another concern is the prescription and administration of drugs during pregnancy which may cross the placental barrier and cause teratogenic fetal effects [4].

In addition, poor oral health can not only affect the woman’s nutrition and oral health-related quality of life, but may be associated with early childhood caries and long-term systemic disorders for the newborn [1].

Unfortunately, apart from self-maintenance of oral hygiene, pregnant women face several barriers in achieving optimal oral health such as lack of knowledge and value, negative oral health experiences, negative attitudes toward oral health professionals and negative attitudes of dental staff toward pregnant women [1].

Oral health screening is not routine in many antenatal clinics, and there are no standard guidelines which ensure that all pregnant women are routinely screened, treated, or referred to specialized dental professionals as part of prenatal care. The pregnant women are referred to dentists