

Oral health comparison between pregnant and nonpregnant women: A comment on Payal *et al.*

Sir,

Poor oral health care among pregnant women is associated with adverse health outcomes and is a neglected public health concern with a paucity of original research on the subject, especially from resource-constrained settings.^[1] The study by Payal *et al.* to an extent fills this gap.^[2] However, I find a few concern with the study methods as follows:

1. The study by Payal *et al.* used a cross-sectional study design with a comparison group in which 320 pregnant women (cases) and 103 age-matched nonpregnant women (“controls”) were selected. However, appropriate age matching of the nonpregnant women controls with the pregnant women cases would require maintaining a 1:1 ratio, i.e., 1 age-matched nonpregnant woman control for every pregnant woman case
2. The community periodontal index score of the pregnant women group was significantly higher than the comparison nonpregnant women group in the study. A Student’s *t*-test was performed to test for statistical difference between the two groups. The application of the Student’s *t*-test requires fulfilling the assumptions of equal variances.^[3] Due to the unequal sample sizes between the pregnant and nonpregnant groups, the variances between the two groups are likely to be unequal. The Welch’s *t*-test (*t*-test for unequal variances) could be more appropriate for this data. In case of a non-normal distribution, the nonparametric Mann–Whitney U-test could also be applied instead
3. The baseline behavioral characteristics relating to dental care were not assessed in the study although they can differ between the pregnant and the nonpregnant group due to the influence of sociocultural factors. Pregnant women especially those belonging to the lower socioeconomic strata have been previously reported to be lacking the knowledge and felt-need for visiting a dentist during the period of pregnancy.^[4]

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Conflicts of interest

There are no conflicts of interest.

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