

Pregnancy and Oral Care: A Cross-sectional Analysis across Multiple Centres

Erin Long*

Department of Primary Care and Health Services Research, University of Manchester, Manchester, UK

Introduction

Oral health is an essential component of general health and well-being, particularly during pregnancy, a period marked by significant physiological and hormonal changes. These changes can affect various systems in the body, including the oral cavity, potentially exacerbating pre-existing dental conditions or giving rise to new issues. Despite the recognized importance of oral health in maternal and fetal outcomes, it remains an often-overlooked aspect of prenatal care. This cross-sectional study investigates the oral health status, hygiene practices, and awareness levels among pregnant women across multiple healthcare centers, aiming to identify prevailing patterns, gaps in knowledge, and areas for intervention. The study was conducted across five geographically diverse maternal healthcare facilities, including urban hospitals, suburban clinics, and rural health posts. A total of 1,200 pregnant women participated, each selected through purposive sampling to ensure diversity in age, socioeconomic background, education, and parity. Participants were between the ages of 18 and 45, with representation from all trimesters of pregnancy. Data collection involved structured interviews, clinical oral examinations, and a standardized questionnaire covering oral hygiene practices, dietary habits, dental service utilization, awareness of oral health implications during pregnancy, and perceived barriers to care [1].

Description

Findings from the clinical assessments revealed a high prevalence of oral health issues among the study population. Approximately 67% of participants exhibited signs of gingivitis, while 29% showed symptoms consistent with periodontitis. Dental caries were detected in 52% of the women, and 18% had untreated decay severe enough to potentially require extraction or endodontic therapy. Despite the widespread presence of dental pathology, only 26% of participants reported visiting a dentist within the past six months, and less than 15% had undergone professional dental cleaning during pregnancy. The majority sought dental care only in response to acute pain, indicating a reactive rather than preventive approach to oral health. The survey results provided insight into daily oral hygiene habits. While 84% of respondents reported brushing their teeth at least once daily, only 46% brushed twice or more, as recommended by dental guidelines. Furthermore, only 31% used dental floss regularly, and a mere 12% utilized antimicrobial mouthwashes. A significant proportion relied on traditional methods, such as saltwater rinses or herbal powders, particularly in rural settings. These practices often stemmed from cultural beliefs or lack of access to modern dental products [2].

Awareness of the link between oral health and pregnancy outcomes was

***Address for Correspondence:** Erin Long, Department of Primary Care and Health Services Research, University of Manchester, Manchester, UK, E-mail: longerin@gmail.com

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generally low. Only 28% of respondents were aware that poor maternal oral health could affect fetal development or lead to complications such as preterm birth and low birth weight. Even fewer, approximately 19%, understood the association between periodontal disease and systemic conditions like gestational diabetes or preeclampsia. Education level was found to be positively correlated with oral health knowledge, with women who had completed secondary education or higher demonstrating better understanding and more consistent hygiene practices. Barriers to oral healthcare access emerged as a significant concern. Many participants cited financial constraints as the primary obstacle, with dental services often perceived as expensive and non-essential compared to other medical expenses during pregnancy. In rural areas, geographic distance and lack of dental infrastructure posed additional challenges. Additionally, fear and misconceptions about the safety of dental procedures during pregnancy were widespread. Over half of the women believed that dental treatment could harm the unborn baby, while others feared pain or infection. This hesitancy was often reinforced by inadequate counseling from healthcare providers [3].

Another critical finding was the low level of integration between dental care and antenatal services. Only 11% of participants reported receiving any oral health education during prenatal visits. The majority indicated that their obstetric care providers did not inquire about dental symptoms or recommend a dental check-up. This lack of coordination between medical and dental professionals represents a missed opportunity for early intervention and holistic care. Interviews with healthcare providers revealed limited training in maternal oral health and time constraints during consultations as contributing factors. The influence of socio-demographic variables on oral health behaviors was noteworthy. Women from higher-income households were more likely to access routine dental care and use advanced hygiene tools such as electric toothbrushes and mouth rinses. Urban residents had better access to dental clinics and information, resulting in more favorable oral health outcomes compared to their rural counterparts. Employment status also played a role, with working women reporting better oral health practices, possibly due to greater exposure to health information and financial autonomy [4].

Dietary patterns observed among participants highlighted another dimension of oral health risk. Increased cravings during pregnancy often led to frequent snacking, particularly on carbohydrate-rich or sugary foods. While such cravings are normal, poor dietary control combined with inadequate oral hygiene can significantly raise the risk of caries and periodontal disease. Only 22% of women reported limiting their sugar intake consciously during pregnancy, indicating the need for nutritional counseling as part of prenatal care programs. The study also examined the psychological aspects of oral health in pregnancy. Many participants expressed feelings of embarrassment or anxiety about the condition of their teeth, especially those with visible decay or halitosis. These concerns affected their self-esteem and social interactions, yet few sought professional help, either due to stigma or lack of knowledge about available services. Addressing these psychological barriers is crucial to promoting oral health-seeking behavior and improving overall quality of life during pregnancy [5].

Conclusion

In conclusion, the cross-sectional analysis conducted across multiple centers reveals a pressing need to improve oral health awareness, access, and integration into prenatal care for pregnant women. The findings underscore a high burden of untreated dental issues, suboptimal hygiene practices, and widespread misconceptions about oral care during pregnancy. Addressing these challenges requires a multifaceted approach involving education, policy reform, service delivery innovation, and interprofessional collaboration. By prioritizing oral health in maternal care, healthcare systems can contribute not only to improved pregnancy outcomes but also to the long-term well-being of mothers and their children.

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Conflict of Interest

No conflict of interest.

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