



## Case Study: Caries Prevention in Young Children



### Principal Investigators

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### Project

Despite the fact that women have a higher susceptibility to dental problems during pregnancy, most women receive little or no dental care during pregnancy. Researchers developed and tested an oral health intervention that integrated easily into CenteringPregnancy® (CP), an existing group prenatal care model. In CP, 8-12 women of similar gestational age receive their prenatal care together in 10 sessions that follow the same visit schedule as traditional prenatal care. This group care model focuses on health self-assessment; education on perinatal health, infant health and development; and social support. The CP curriculum is designed to empower women to advance their own health and the health of their families.

CP's local leadership had raised the concern that many of the women attending the program had mentioned having oral health problems. Through the CenteringPregnancy® Oral Health Promotion (CPOP) Pilot Study, researchers focused on improving oral health among pregnant women and their soon-to-be-born children. The researchers worked in close partnership with CP to develop an intervention curriculum and to train CP Clinical Nurse Midwife facilitators to deliver the curriculum to expectant mothers attending CP groups.

The researchers held focus groups with pregnant women at CP to explore how women would respond to receiving oral health information and the kinds of study-related procedures that they might be willing to undergo, including how they would feel about having a dental exam and where they would prefer to receive it.

The oral health intervention consisted of two modules: one on maternal oral health and the other on infant oral health. The women learned and practiced effective techniques for brushing and flossing their teeth; received information about the importance of dental care during pregnancy; and learned about infant oral health, including how to take care of an infant's mouth and proper feeding techniques to promote infant oral health.



The pilot study enrolled about 100 women from four CP locations. All participants received an explanation of study procedures and completed an assessment. Half the women were in CP groups that received the intervention and half were in groups that did not. The intervention and control groups each included an English language and Spanish language location.

The National Institute of Dental and Craniofacial Research funded the clinical pilot study.

## Target Population

The researchers focused their study on expectant mothers who used CP's prenatal care program, which comprises mostly low-income women who have either public health insurance or no health insurance. About half the women were Spanish speakers.



## Recruitment Approach

- The researchers recruited women to the pilot study from the CP prenatal care program. The intervention was given at only some CP sites but not at others.
- Women begin attending the CP prenatal program when they are about 3 months pregnant. The first few sessions of the 10-session course occur on a monthly basis and then increase to every other week. For the pilot study, a CPOP research associate visited the CP sites during the second session to present a brief overview of the study and to invite women to participate. The associate collected contact information from women who were interested in learning more about the study, and she either spoke with them after the prenatal session or called them later to discuss the study in detail. The women could complete the consent process on the spot or take the paperwork home.
- Women who agreed to take part in the study, in either the intervention or the control groups, had an assessment and a dental exam. Women in the control group received the standard CP curriculum. Women in the intervention group received the CPOP intervention as integrated into their CP care, which meant it was also given to women who had declined to participate in the assessment portion of the study.

## Primary Barriers



Time and convenience served as major barriers to women's participation and attendance.

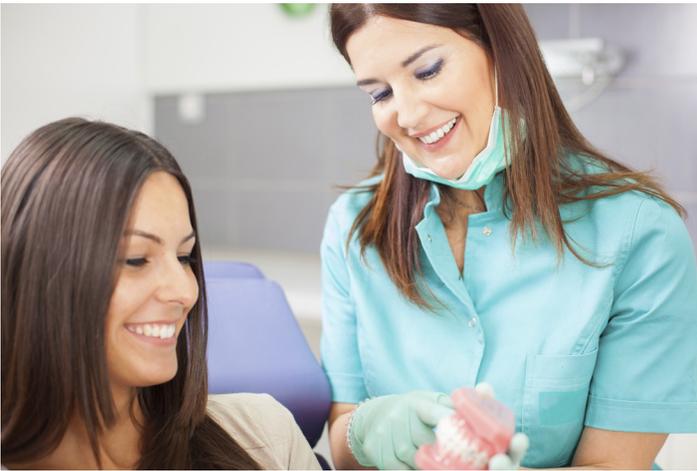


Bad weather could negatively affect women's attendance, particularly if the women needed to navigate public transportation with one or more children. On days with heavy rain, study participants' no-show rate for dental exams was significant.

## Successful Recruitment Strategies

- CP facilitators are trusted leaders among the CP groups, so when they advocated the benefits of participation, this had a positive impact on women's decision to participate.
- The CP model encourages women to expand their knowledge about topics that increase their possibility of having a healthy pregnancy and a good birth outcome. In this health-focused setting, the women were extremely interested in the intervention, particularly the potential oral health benefits for their soon-to-be-born infants.
- To recruit women for the study from the CP sessions, the researchers sent a female research associate to CP sites who was friendly and, like many of the participants, Hispanic.
- The participation rate for the intervention group was more than 90 percent. The participation rate for the control group was lower, partly because one of the sites chosen did not provide parking and, as CP facilitators predicted, the women at that site were generally unwilling to stay extra time after the CP session to participate in the study.





### Retention Strategies

- Based on the findings from the focus groups held before the study, the researchers scheduled the dental exams at the participating CP sites for immediately before or after a CP session.
- Participants could choose whether to complete the questionnaire at the time of their dental exam or at another more convenient time, including over the phone.
- Participants could bring their children with them to the dental exam; consequently, childcare was not an issue.
- Because participants were in CP groups together, they may have been motivated to stay in the study together.

### Lessons Learned

- The women in this population were highly motivated by their understanding of the value in promoting the health of their families, particularly the health of their soon-to-be-born infants.
- The women were interested in sharing their knowledge about oral health. In the facilitated environment in which this study was conducted, sharing knowledge was a natural part of the experience.
- By conducting focus groups before the pilot study, the researchers learned that women were very interested in learning about oral health. The intervention modules, however, had to be limited because they took place within the CP program and could only take a certain length of time from the regular CP prenatal sessions. Consequently, the researchers augmented the knowledge provided in the modules with materials that the women could read at home, including copies of content presented in the modules and information on additional resources.
- CP's organizational support was vital to the study's success. The leaders of that organization served as gatekeepers to the study population.

