

CENTERING PREGNANCY PLUS (CPP)

Best Evidence – Risk Reduction

INTERVENTION DESCRIPTION

Intended Population

- Young pregnant women receiving prenatal care

Goals of Intervention

- Reduce sexually transmitted infection (STI) incidence
- Reduce sexual risk behavior
- Reduce repeat pregnancy
- Reduce psychosocial risk factors

Brief Description

Centering Pregnancy Plus (CPP) is a group-level intervention that combines prenatal care with HIV prevention education and skills building. The integrated intervention is delivered in 10 sessions of 120 minutes each to groups of 8-12 women during pregnancy. Following the initial individual assessment, all prenatal care is provided in the group setting to incorporate family and peer support. The young women engage in self-care activities and group discussion that covers childbirth preparation and prenatal and postpartum care. Sessions 4, 5, and 7 each devote 40 minutes to HIV prevention skills. Session 4 includes video testimonials of HIV infected adolescents to heighten perceptions of risks and social norms, discussions of condom use barriers and benefits, and goal setting. Sessions 5 and 7 use modeling and role play to develop sexual communication skills. Session 7 also leads participants to evaluate previous goals and to set new postpartum safer sex goals.

Theoretical Basis

- Ecological model
- Social Cognitive Theory

Intervention Duration

- Ten weekly 120-minute sessions during pregnancy from 16 to 40 weeks gestation

Intervention Setting

- Public prenatal clinic

Deliverer

- Trained practitioner (e.g., midwife, obstetrician)

Delivery Methods

- Goal setting and evaluation
- Discussion
- Modeling
- Role-play
- Video

INTERVENTION PACKAGE INFORMATION

An intervention package is not available at this time. Please contact **Trace Kershaw**, Yale School of Public Health, Room 415, 60 College Street, New Haven, CT 06520-8034.

Email: trace.kershaw@yale.edu for details on intervention materials.

EVALUATION STUDY AND RESULTS

The original evaluation was conducted in Atlanta, GA and New Haven, CT between 2001 and 2004.

Key Intervention Effects

- Increased condom use
- Decreased unprotected sex
- Reduced STI incidence

Study Sample

The baseline study sample of 1,047 young pregnant women is characterized by the following:

- 80% Black or African American, 13% Hispanic or Latina, 6% White, 1% mixed or another race/ethnicity
- 100% female
- Mean age of 20 years, range: 14-25 years

Recruitment Settings

Public prenatal clinics

Eligibility Criteria

Women were eligible if they were pregnant at less than 24 weeks gestation, aged 25 years or younger, had no severe medical problem (e.g., diabetes, hypertension, HIV), and were able to attend groups conducted in English or Spanish.

Assignment Method

Women (N = 1,047) were assigned using by block randomization, stratified by site and expected month of delivery, to 1 of 3 study arms: Centering Pregnancy Plus (CPP, n = 318), Centering Pregnancy (CP, n = 335), or individual standard of care (IC, n = 394).

Comparison Group

- The Centering Pregnancy (CP) group received ten 120-minute structured group prenatal care sessions, delivered by a trained practitioner to groups of 8-12 women. Participants engaged in self-care activities, such as weight and blood pressure assessments, and group discussions that addressed issues in prenatal care, childbirth preparation, and post-partum care that CPP participants also received.
- The Individual care (IC) group, which received traditional prenatal care, was combined with CP for evaluation of the CPP intervention.

Relevant Outcomes Measured and Follow-up Time

- Sex behaviors (including number of unprotected sex occasions in the past 30 days among all participants and percentage of condom use in the past 6 months among sexually active participants) were measured at 6 and 12 months postpartum.
- Bacterial STI acquisition (including Chlamydia and gonorrhea) was measured independently of previous STI diagnoses at 6 and 12 months postpartum.

Participant Retention

- Centering Pregnancy Plus
 - 79% retained at 6 months postpartum
 - 82% retained at 12 months postpartum
- Centering Pregnancy
 - 72% retained at 6 months postpartum
 - 81% retained at 12 months postpartum
- Individual Care
 - 75% retained at 6 months postpartum
 - 78% retained at 12 months postpartum

Significant Findings

- CPP intervention participants reported significantly fewer occasions of unprotected sex in the past 30 days than CP and IC comparison participants combined, at 12 months postpartum ($F = 3.78$, $p = .0482$).
- Among sexually active women, CPP intervention participants reported a significantly greater percentage of condom use in the past 6 months than CP and IC comparison participants combined, at 6 months ($F = 7.45$, $p = .007$) and 12 months postpartum ($F = 3.93$, $p = .04$).
- Among sexually active adolescents aged 14-19, CPP intervention participants were significantly less likely to acquire a bacterial STI at 12 months postpartum than CP and IC comparison participants combined ($OR = .48$; 95% CI = .24, .96; $p < .05$) and IC comparison participants alone ($OR = .37$; 95% CI = .17, .77; $p < .05$).

Considerations

- CPP intervention participants were less likely to have a repeat pregnancy at 6 months post-partum than CP and IC comparison participants combined ($OR = .49$; 95% CI = .27, .91; $p < .05$).
- CPP intervention participants were more likely to report using condoms for STI protection at 12 months post-partum than CP and IC comparison participants combined (64% vs. 55%; $p = .028$).
- CPP intervention participants reported significantly more communication with their sexual partners about safe sexual activity than CP and IC comparison participants combined during the third trimester of pregnancy ($F = 25.98$; $p = .001$) and at 12 months postpartum ($F = 3.78$; $p = .05$).

REFERENCES AND CONTACT INFORMATION

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