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Impact of Group Prenatal Care on Health Outcomes for Women of Color in the United States: A Systematic Literature Review

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Introduction

- Women of color (WOC) experience higher rates of adverse pregnancy-related health outcomes, both in the prenatal and postpartum periods (CDC, 2019). Yet, there is a paucity of research supporting interventions that promote health equity and racial justice for pregnant WOC.
- In traditional prenatal care (TPC), most women spend less than two hours total one-on-one with their provider during their entire pregnancy (Carter et al., 2016). With such time constraints, patients are limited in what questions, concerns, and anticipatory guidance may be discussed.
- Group prenatal care (GPC) is an alternative model to individual care that has been associated with increases in birth weight for preterm infants, breastfeeding initiation, and utilization of postpartum family planning services, decreases in preterm birth rates, and higher patient satisfaction and knowledge gained overall (Carter et al., 2016).
- This systematic literature review sought to fill this gap in knowledge and answer the following question: *For women of color in the United States, how does participating in group prenatal care affect health outcomes?*

Methods

Databases Searched: CINAHL, PubMed
Keywords Used: "Group prenatal care" or "CenteringPregnancy" or "group antenatal care" and "Women of color or Black* or Latin* or African American* or Hispanic* or minorit* or BIPOC or Native American* or tribal or indigenous"
Inclusion criteria: (1) Quantitative research published in a peer-reviewed journal between 2010 and 2020, (2) written in the English language in the United States, (3) included women of color majority or data analysis by race, (4) and examined health outcomes.

Figure 1. Group Prenatal Care. Retrieved from Shutterstock.

Results

- Ten studies (1 meta-analysis and 9 retrospective cohort studies/medical chart reviews) were included for the final review (Figure 2).
- Quality appraisals suggest high levels of quality with scores ranging from 18-24 on a scale of 0-25.
- Data extraction and analysis revealed three categories of health outcomes: (1) newborn outcomes, i.e. rates of preterm birth (PTB), low birthweight (LBW), and neonatal intensive care unit (NICU) admissions, (2) maternal outcomes, i.e. development of gestational diabetes, breastfeeding initiation and continuation, and gestational weight gain, and (3) healthcare utilization, i.e. use of family-planning services, satisfaction with prenatal care, and postpartum follow-up.
- Five studies analyzed rates of PTB following the intervention. Hispanic women enrolled in GPC were found to be 49% ($p < .001$, CI [0.38 – 0.69]) and 48% ($p < .0001$, CI [0.43 – 0.63]) less likely to experience PTB than white woman enrolled in GPC (Picklesimer et al., 2012; Abshire et al., 2019).
- The search yielded strong data for the outcomes of breastfeeding initiation and continuation for Black women. The meta-analysis (Robinson et al., 2018) revealed that Black women enrolled in GPC are 1.53 times more likely to initiate breastfeeding than those enrolled in TPC ($p < .0001$, 95% CI [1.29 – 1.81]).
- In two studies (Trudnack et al., 2013; Tandon et al., 2013), participants enrolled in GPC rated their satisfaction with their prenatal care higher than those enrolled in TPC. In one study, WOC enrolled in GPC were less likely to gain excessive weight during pregnancy than those enrolled in TPC (RRR = .37, $p = .04$, 95% CI [-1.92 - .06]).

Discussion

- Overall, published studies support efficacy of GPC in improving health outcomes for pregnant women of color in the United States.
- All ten studies showed general health benefits for women of color that were both statistically and clinically significant.
- Outcomes of preterm birth, low birth weight, and rates of breastfeeding initiation were the strongest.
- The evidence for Hispanic women was stronger than that for Black women, since only six of the studies included Black women in the sample.

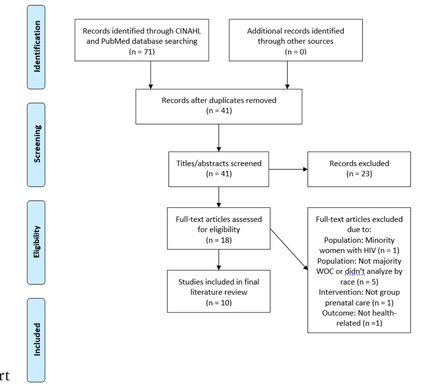

Figure 2. PRISMA Flow Chart

Implications & Limitations

- GPC is an innovative and promising intervention that may be utilized by healthcare providers to improve health outcomes for their patients. Practitioners and administrators should seek to adopt GPC models with the goal of reducing health disparities for WOC.
- Comprehensive education and training must be made available for providers. Universities and hospitals should incorporate lessons on GPC into their curricula and provide facilitator training.
- Federal and/or grant funding is necessary to train providers and make GPC models sustainable. Policymakers and advocates should support legislative bills that seek to improve maternal health with unconventional and cost-effective approaches like GPC.
- More research is needed on the impact of GPC on specific health outcomes for WOC, particularly Black women.
- Study Limitations: Risk of sampling, reporting and publication bias due to retrospective study design and GPC reserved for low-risk pregnancies.
- Review Limitations: Only two databases used, inexperience in conducting SLRs, time restraints, broad population & outcomes.

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