

Intervention IP-085: NIH-DC Initiative to Reduce Infant Mortality in Minority Populations: Healthy Outcomes of Pregnancy Education

Summary

This intervention was designed to reduce psychosocial and behavioral pregnancy risk factors among African American or Black pregnant women living in Washington, DC. Participants were randomized to receive clinic-based individually tailored counseling sessions (intervention) or usual care only, and primary outcomes included cigarette smoking, secondhand smoke exposure, depression, and intimate partner violence. Findings showed that intervention participants, as compared to participants who received usual care only, more frequently resolved some or all of their risk factors.

Overview

Purpose of Intervention:

This intervention was a congressionally mandated project to address the high African-American infant mortality rate in Washington, D.C.

Intervention Type:

Research-Tested — *Interventions with strong methodological rigor that have demonstrated short-term or long-term positive effects on one or more targeted health outcomes to improve minority health and/or health disparities through quantitative measures; Studies have a control or comparison group and are published in a peer-review journal; No pilot, demonstration or feasibility studies.*

Intervention Details

Intervention was Primarily Driven, Led, or Managed by:

Academic/Clinical Researchers Only

Citations:

- IP-085_Reduce Infant Mortality in Minority Populations_publications.pdf
(Available upon request in "Products, Materials, and Funding" section)
Relevance: Main Intervention, Post-Intervention Outcomes

Adaptation of Another Research-based Intervention:

Yes

Name of Original Intervention:

Testing an intervention to prevent further abuse to pregnant women

Name of Original Intervention Author:

Barbara Parker, Center for Nursing Research and Doctoral Program, University of Virginia, School of Nursing, Charlottesville, VA 22902.

URL to original Intervention:

[https://doi.org/10.1002/\(SICI\)1098-240X\(199902\)22:1<59::AID-NUR7>3.0.CO;2-B](https://doi.org/10.1002/(SICI)1098-240X(199902)22:1<59::AID-NUR7>3.0.CO;2-B)

Citations:

- Kiely M, El-Mohandes AAE, El-Khorazaty MN, Gantz MG. An integrated intervention to reduce intimate partner violence in pregnancy: a randomized controlled trial. *Obstetrics and gynecology*. 2010 Feb;115(2 Pt 1):273-283.

Intervention Primary Outcomes were comparable to the original:

Yes

Additional Influences:

- Shneyderman Y, Kiely M. Intimate partner violence during pregnancy: victim or perpetrator? Does it make a difference? *BJOG : an international journal of obstetrics and gynaecology*. 2013 Oct;120(11):1375-85. Epub 2013 Jun 21.

Contact Information**Primary Contact Name:**

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Intervention URL:

Not available

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Results

Intention

Improve minority health or the health of other populations with health disparities (e.g. rural populations, populations with low SES)

Intervention Primary Outcome:

Improvement in pregnancy outcomes

Intervention Secondary Outcome:

Reduction in psycho-social risks addressed by the intervention: intimate partner violence, depression, smoking, and environmental tobacco smoke exposure

Key Findings:

Women randomized to the intervention had significantly improved rates of very low birth weight (OR: 0.11 [95% CI: 0.01-0.86]) and very preterm birth (OR: 0.22 [95% CI: 0.07-0.68]).

Women randomized to the intervention compared to usual care

- Resolved some or all of their risks (OR = 1.61 [95%CI = 1.08-2.39])
- Less likely to have recurrent IPV victimization episodes (OR=0.48 [95%CI=0.29-0.80]), & less likely to experience further episodes during pregnancy (OR=0.53 [95%CI=0.28-0.99]) & postpartum (OR=0.56 [95%CI=0.34-0.93])
- Less likely to report environmental tobacco smoke exposure (ETSE) before delivery (OR=0.50 [95%CI=0.35-0.71])
- Reduction in # of risks postpartum
- If previously smoking less likely to relapse

Being very happy about the pregnancy, having emotional support, and positive expectations about regulating negative moods were associated with decreased depressive symptoms.

Statistical Method Used:

Site- and risk-specific permuted block randomization was used for the intervention or usual care. Investigators and field workers were blinded to block size. All the possible risk combinations within each of the recruitment sites were considered. Data were analyzed using intent-to-treat. Analyses used SAS. Bivariate analysis preceded logistic regression based on care group assignment. Adjusted odd ratios were produced by models that included care group plus other covariates.

Was statistical method used to analyze data from original Intervention comparable to the original:

Yes

Evaluations and Assessments

Were Any of the Following Assessments Conducted (Economic Evaluation, Needs Assessment, Process Evaluation)?:

No

Demographic and Implementation Description

Diseases, Disorders, or Conditions:

Women's Health and Pregnancy

Race/Ethnicity:

African American or Black, Hispanic or Latino

Populations with Health Disparities:

People with Lower Socioeconomic Status (SES), Racial and Ethnic Minority Populations

Age:

Young Adults (18 - 39 years)

Socio-demographics / Population Characteristics

Community Type:

Urban / Inner City

Other Populations with Health Disparities:

Unspecified

Geographic Location:

District of Columbia

Socio-Economic Status:

Low SES

Minority Health and Health Disparities Research Framework

		Levels of Influence			
		Individual	Interpersonal	Community	Societal
Determinant Types	Biological				
	Behavioral	✓	✓		
	Physical / Built Environment	✓			
	Sociocultural Environment				
	Health Care System				

Community Involvement

The community's role in different areas of the Intervention (Choices are "No Role", "Participation", and "Leadership"):

Design:

No Role

Dissemination:

Participation

Evaluation:

No Role

Implementation:

Participation

Outreach:

Participation

Planning :

Participation

Recruitment:

Participation

Sustainability:

No Role

Characteristics and Implementation

Intervention Focus Area:

Behavior Change

Disease Continuum:

Primary Prevention, Treatment

Delivery Setting:

Clinic / Health Care Facility

Mode of Delivery:

In-person

Who delivered the Intervention?:

N/A

Conceptual Framework

Intervention Theory:

Social Cognitive / Social Learning Theory, Dutton's Empowerment Theory; Cognitive Behavioral Theory

Intervention Framework:

None

Implementation

Intervention Study Design:

Cluster Randomized Controlled Trial

Targeted Intervention Sample Size:

1044

Actual Intervention Sample Size:

1044

Start Year:

2001

End Year:

2004

Intervention Exposures

Duration of Intervention/How Long it Lasted:

4-6 months

Frequency of Intervention Delivery:

Every time a woman attended a prenatal care visit, she was invited to participate.

Number of Sessions/Meetings/Visits/Interactions:

3-4 Sessions

Average Length of Each Session/Meeting/Visit/Interaction:

Less than 1 Hour

Format of Delivery:

Individual

Highest Reading Level of Intervention Materials Provided to Participants:

Unspecified

Adaptations and Modifications

Were modifications made?

Intervention Elements	Modified
Content	No
Context	No
Implementation	No
Funding	No
Organization	No
Participants	No
Providers	No
Sociopolitical	No
Stages of Occurrence	Yes

Modification Details

	Explanation
Stages of Occurrence	
Other	As sites closed, other hospitals were recruited to enroll a sufficient sample for statistical power.

Impact, Lessons, Components

Produced an impact or change beyond the primary or secondary outcome:

No

Essential Aspects for Success:

Intervention delivery occurred with prenatal and postpartum visits. Sessions were 45 minutes. The standard sequence for the intervention: Cigarette smoking and/or environmental tobacco exposure, depression, and intimate partner violence. Intervention sequence adjusted as needed. Women had homework.

Intervention Impact:

Not available

Lessons Learned

Key Lessons Learned and/or Things That Could be Changed or Done Differently:

- Deliver interventions and other research activities where and when convenient for participants.
- Use technology to screen for at-risk behaviors, collect sensitive information, and enhance retention participation.
- Integrate counseling and education.
- Involve family members in intervention activities.

Insights Gained During Implementation

Insight Category	Insight Description
Training / Technical Assistance	Used role-playing for recruiters and interventions to demonstrate respect and cultural sensitivity and to treat study participants with dignity regardless of their circumstances or appearances.
Recruitment	Only randomize women who successfully completed a baseline telephone survey. Used Audio-Computer Assisted Self-Interview to circumvent issues about literacy.

Intervention Components

Intervention Has Multiple Components:

Yes

Assessed Each Unique Contribution:

Yes

Products, Materials, and Funding

Expertise, Partnerships, and Funding Sources

	Used for Implementation	Needed for Sustainability
Expertise		
Health Education / Health Literacy	Yes	Yes
Partnerships		
Health care facilities (local clinics)	Yes	Yes
Funding Sources		
Public funding (e.g., federal, state or local government)	Yes	Unknown

Product/Material/Tools

	Tailored For Language	Language(s) if other than English	Material
Outreach/Recruitment Tools			
Publicity Materials (e.g. Posters, Flyers, Press Releases)	No		Attachment available for request at the bottom of the page.
Recruitment Manual	No		Attachment available for request at the bottom of the page.
Participant Educational Tools			
Reproductive Health (tool not available)	No		Attachment available for request at the bottom of the page.
Measurement Tools			
Conflict Tactics Scale (proprietary)	No		https://emerge.ucsd.edu/r_1pZR12hywnkog9o/
Beck Depression Inventory	No		Attachment available for request at the bottom of the page.

Implementation Materials and Products

Material	
Implementation/Delivery Materials	
Intervention implementation guidelines	Attachment available for request at the bottom of the page.
Implementation/Output Materials	
No Implementation/Output Materials provided.	

Articles Related to Submitted Intervention

Article	
Reports/Monographs	
No Reports/Monographs provided.	
Additional Articles	
intervention outcomes	https://pubmed.ncbi.nlm.nih.gov/20211945/
intervention and outcome (smoking cessation and relapse)	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3218216/
Outcome (VPTB)	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2988881/
Qualitative findings	https://www.sciencedirect.com/science/article/pii/S1049386711000090?via%3Dihub
Qualitative findings	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3220795/
Qualitative findings	https://obgyn.onlinelibrary.wiley.com/doi/10.1111/1471-0528.12202

Materials Available for Request

- Recruitment Brochure.pdf
- Recruitment Manual.pdf
- Reproductive Health Manuscript.pdf
- Beck-Depression-Inventory-BDI.pdf
- intervention Manual.pdf
- IP-085_Reduce Infant Mortality in Minority Populations_publications.pdf

Request Materials
Enter Email Address <input type="text"/> <input type="button" value="Request"/>