

# Stopping the Thief that Steals Motherhood: Screening, Preventing and Treating Postpartum Depression

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# Postpartum Depression

- The most under-diagnosed obstetrical complication in the US:
  - Postpartum depression is a common and complicated illness that affects about 15% of women after the birth of a child.
  - Rates are about double for low-SES women with 1 in 3 to 4 women experiencing postpartum depression
  - Postpartum depression can occur up to 1 year after having a baby, but it most commonly starts about 1–3 weeks after childbirth

# Postpartum Depression

- Many women with postpartum depression actually begin to experience symptoms during pregnancy.
- Women with postpartum depression are a heterogeneous group.
- Most women suffering from postpartum depression present with varying degrees of anxiety.
- About 11% of women have significant depressive symptoms in the first 5 years of their child's life

# Symptoms of Postpartum Depression

- Feeling sad, hopeless, empty, or overwhelmed
- Crying more often than usual
- Worrying or feeling overly anxious
- Feeling moody, irritable, or restless
- Oversleeping or being unable to sleep when your baby is asleep
- Having trouble concentrating and making decisions
- Frequent feelings of anger or rage
- Losing interest in activities that are usually enjoyable
- Suffering from physical aches and pains
- Eating too little or too much
- Avoiding friends and family
- Having trouble bonding with your baby
- Fear that you're not a good mother
- Hopelessness
- Feelings of worthlessness, shame, guilt or inadequacy
- Persistently doubting your ability to care for your baby
- Thinking about harming yourself or your baby

Often not recognized because changes in sleep, libido, weight attributed to normal postpartum changes

# Impact of Postpartum Depression

- Postpartum depression is a risk factor for impaired mother-infant bonding
  - Less maternal affective involvement, decreased attentiveness to the baby's cues, irritability, and intrusiveness.
  - Not all women with postpartum depression have difficulty with bonding
  - Does postpartum depression cause bonding difficulties or other way around?

# Impact of Postpartum Depression

- Strong evidence that exposure to postpartum depression leads to poor cognitive and language development in offspring from infancy to late childhood, especially for low SES women
- Related to reduced likelihood of preventative parenting behaviors (e.g., breastfeeding, well child visit attendance, and car seat use)
- Multiple studies show that maternal depressive symptoms can lead to worse executive functioning, lower IQ, behavioral problems and increased vulnerability to psychiatric illness..

# Risk Factors for Postpartum Depression

- ✓ History of depression
- ✓ Familial history of depression
- ✓ Social Isolation
- ✓ Recent life stress
- ✓ Low level of partner support
- ✓ Unplanned/unwanted pregnancy
- ✓ High level of partner conflict/abuse
- ✓ Inadequate social support in general
- ✓ Economic disadvantage

# Screening for Postpartum Depression?

- Our ability to screen women for postpartum depression has improved with the use of validated measures and the use of tablets.
- Most states have implemented universal screening of pregnant and postpartum women
- The Edinburgh Postnatal Depression Scale (EPDS) is the most frequently used measure to screen for perinatal depression.



# Screening for Postpartum Depression?

- **The Edinburgh Postnatal Depression Scale (EPDS)**

- ✓ Translated into 50 languages
- ✓ Relatively brief with 10-items
- ✓ Takes less than 5 minutes to complete
- ✓ Excludes constitutional symptoms of depression, such as changes in sleep patterns.
- ✓ Positive screen with scores of 9-13

- **The Patient Health Questionnaire-9 (PHQ-9)**

- ✓ 9 items
- ✓ PHQ-9 has been found to be superior performance to the EPDS in women with primarily somatic depressive symptoms.
- ✓ EPDS was superior in women with comorbid depression and anxiety

- **Other screening measures have 20-items**

- Beck Depression Inventory, CES-D

- **PHQ-2**

- ✓ Two items

# PHQ-2 Scoring

- Scoring: A PHQ-2 score ranges from 0 to 6; patients with scores of 3 or more should be further evaluated with the PHQ-9, other diagnostic instruments(s), or a direct interview to determine whether they meet criteria for a depressive disorder.

Over the past 2 weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than one-half of the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3

# Screening for Postpartum Depression?

- Even when routine screening and referral, vast majority of women are not referred, only a small percentage get to a mental health provider, or if they do, few receive adequate treatment.
- Common reasons why women decide not to seek treatment:
  - Stigma
  - Belief that they will not recover from their depressive symptoms
  - Inability to find transportation to an appointment
  - Lack of time

# Treatment of Postpartum Depression

Meta-analyses for psychological interventions for postpartum depression show support for

- Cognitive-behavioral therapy
- Interpersonal Psychotherapy

Antidepressants for postpartum depression have not shown superiority over psychological interventions.

Zulresso (brexanolone), a novel new antidepressant medication for the treatment of postpartum depression, needs to be administered by a health care provider in a recognized health care setting intravenously over 2.5 days (60 hours)

# Treatment of Postpartum Depression

## Breastfeeding women with Postpartum Depression

All medications taken by the mother are secreted into the breast milk. However, infant exposure of antidepressants through breast milk is generally low to very low.

Sertraline and paroxetine (among SSRIs) are the most evidence-based medications for use during breastfeeding because usually undetectable infant serum levels and no reports of short term adverse events

# Screening and Treatment are Important but Prevention is even Better

## Reasons for Prevention include

- ✓ High prevalence rates of postpartum depression
- ✓ Personal suffering associated with postpartum depression
- ✓ Negative effects on offspring
- ✓ Financial costs of a full blown episode of depression
- ✓ Even when routine screening and referral, overall rates of treatment use are low
- ✓ Even with treatment, it can take 4 to 8 weeks to start recovering.

**REACH OUT STAY  
STRONG  
ESSENTIALS**

**ROSE**

**FOR NEW MOMS**



# ROSE Program

## An empirically based intervention


Five randomized clinical trials have shown that ROSE reduces risk of postpartum depression in low-income women by half.

ROSE Program is the only intervention, to date, that

- ✓ Significantly reduces cases of postpartum depression
- ✓ Studies used a validated diagnostic measure of postpartum depression
- ✓ Positive findings have been replicated
- ✓ Tested in community settings with racially and ethnically diverse women
- ✓ Tested in heterogeneous samples (e.g., teens and low-income pregnant women)

**ROSE prevents half of PPD cases among low-income women**



The slide features a white background with decorative pink petals scattered in the corners. A cluster of petals is in the top right corner, another in the bottom left corner, and a few more are scattered along the left edge.

ROSES has been specifically cited in the new U.S. Preventive Services Task Force recommendation regarding preventing postpartum depression.

# Prevention

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**The New York Times**

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## ***Depression During and After Pregnancy Can Be Prevented, National Panel Says. Here's How.***

The task force of experts recommended at-risk women seek certain types of counseling, and it cited two specific programs that have been particularly effective.



# Rose Program Core Elements and Flexible Elements

Standard ROSE Program Outline		
During pregnancy	Session 1	Interpersonal rationale for program, course outline, ground rules, signs/symptoms of "baby blues" and PPD.
	Session 2	Stress management skills, managing the transition to motherhood, identifying positive supports.
	Session 3	Teaches types of interpersonal conflicts common around childbirth and role plays techniques for resolving them.
	Session 4	Skills for resolving interpersonal conflicts, setting goals, review
Postpartum booster		Reviews/reinforces previous sessions, problem-solves difficulties using skills, reviews available resources

ROSE Core Elements	ROSE Flexible Elements
<p>Psychoeducation on:</p> <ul style="list-style-type: none"><li>• PPD</li><li>• Managing stress in transition to motherhood</li><li>• Social support as a buffer against PPD</li><li>• Relevant postpartum resources</li></ul> <p>Teaching:</p> <ul style="list-style-type: none"><li>• Communication skills via role plays</li><li>• Stress management skills</li><li>• Building and enhancing social skills</li></ul> <p>Review/reinforce skills at postpartum session</p>	<p>Group vs. individual</p> <p>Office vs. home visit</p> <p>Time during pregnancy</p> <p>Order of sessions</p> <p>Open enrollment of group</p> <p>Missed sessions can be made up</p> <p>Sessions can be split into shorter pieces or lumped together</p>

# ROSE SUSTAINMENT STUDY

Funded Support:  
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MICHIGAN STATE  
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# Goals of ROSE Sustainment Study (ROSES)

- Support the integration of the evidence-based ROSE Program into the workflow of prenatal agencies serving low income women
- Increase the number of pregnant patients receiving ROSE
- Determine what supports agencies need to sustain ROSE over time

The ROSES Study partners with 90 agencies providing prenatal services to low-income women in all 50 US States.

# What the ROSES Study will offer to agencies

- Free ROSE Program to use: ROSE Program manual with patient handouts in English and Spanish, a copy of PowerPoint training slides, scripts for presenting ROSE to potential participants, flashcards for educators, recruitment flyers and taped training session.
- Free initial training (3-4 hour) in how to deliver ROSE.
- Technical assistance on implementing and sustaining ROSE , including a customized plan for implementing ROSE within the agency's logistics (e.g., identifying and referring participants for ROSE, billing codes, etc).



# Class Member Workbook

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ESSENTIALS**

**ROSE**

**FOR NEW MOMS  
WORKBOOK**

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# What is expected from participating agencies?

There is **no cost** to participate.

Your agency will be asked to:

1. Participate in the study for a 2.5 year period
2. Participate in ROSES Study training activities
3. Participate in ROSES Study surveys and other research procedures



# Training Activities

## Three initial meetings:


1. Overall orientation. An initial 1.5 to 2 hour initial meeting with Dr. Zlotnick and Dr. Johnson by videoconference with key operational and clinical staff. This will result in a written, tailored implementation plan provided by the study.
2. 3<sup>1/2</sup> hour training with Dr. Zlotnick or your staff delivering ROSE via videoconference on how to conduct ROSE.
3. 60-90 minutes with operational staff with Dr. Johnson to discuss administrative issues (such as reimbursement, identification and referral procedures, identification of suitable providers)

Agencies who experience challenges with implementing ROSE may be randomized to receive ongoing clinical and technical assistance on a quarterly or monthly basis. These clinics/agencies will also be invited to participate in a phone call with other clinics/agencies to share successes and problem-solve any challenges.


# Research Activities

Participate in study questionnaires over a 2.5 year period

- Two people from your agency will complete online surveys at baseline, 3, 6, 9, 12, 15, 18, 24, and 30 months. The surveys include reporting # patients invited to and attending ROSE, and overall rates of positive postpartum depression screens at your agency (any method). Staff who complete the surveys will receive a \$100 honorarium for each survey.
- About 1 in 3 times, your staff completing the surveys will have a brief (20-30 minute) interview with us
- The staff delivering ROSE at your agency will complete a very brief checklist (60 seconds) after each ROSE session. They will collect these and fax them back to us every few weeks



We ask agencies to conduct ROSE Program Sessions for patients as feasible in your agency. (For instance, agencies plan to use videoconferencing, offer it to all pregnant women, offer it to only high-risk pregnant women).



You don't commit to offering ROSE,  
just to trying.

# Opportunity for Clinics/Agencies Providing Prenatal Services

We are enrolling 90 clinics/agencies across the U.S.

If your agency:

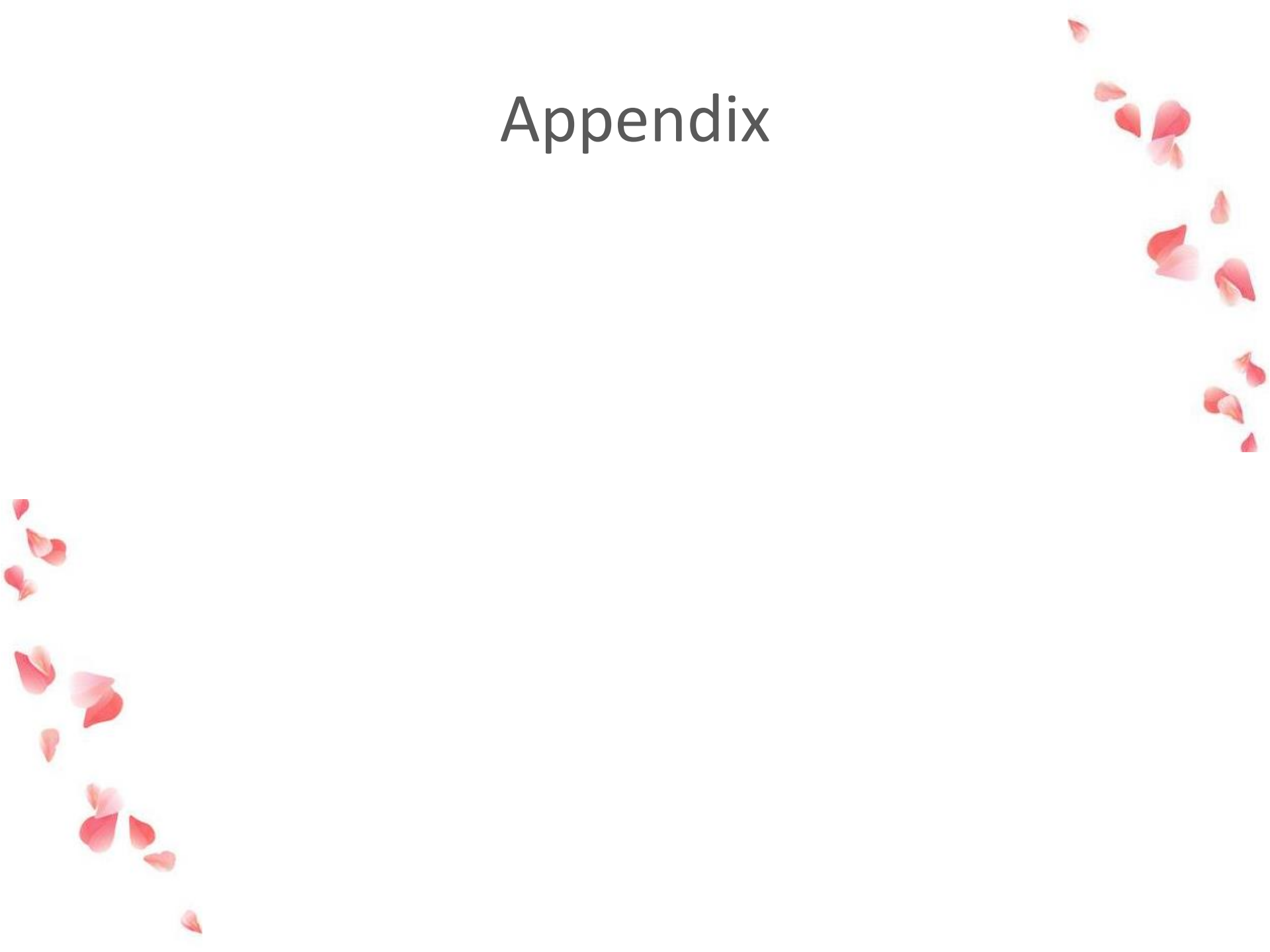
- Provides outpatient prenatal services (e.g., OBGYN, FQHC, etc.)
- Estimates that ~30%+ of your pregnant patients receive Medicaid

Your agency can get free training and technical assistance in ROSE, along with free ROSE materials, in exchange for completing quarterly surveys about how ROSE is being used.

**Email: [ROSES.Study@msu.edu](mailto:ROSES.Study@msu.edu)**

# ROSES

# Appendix



# ROSES Study Collaborators

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## Funding Support

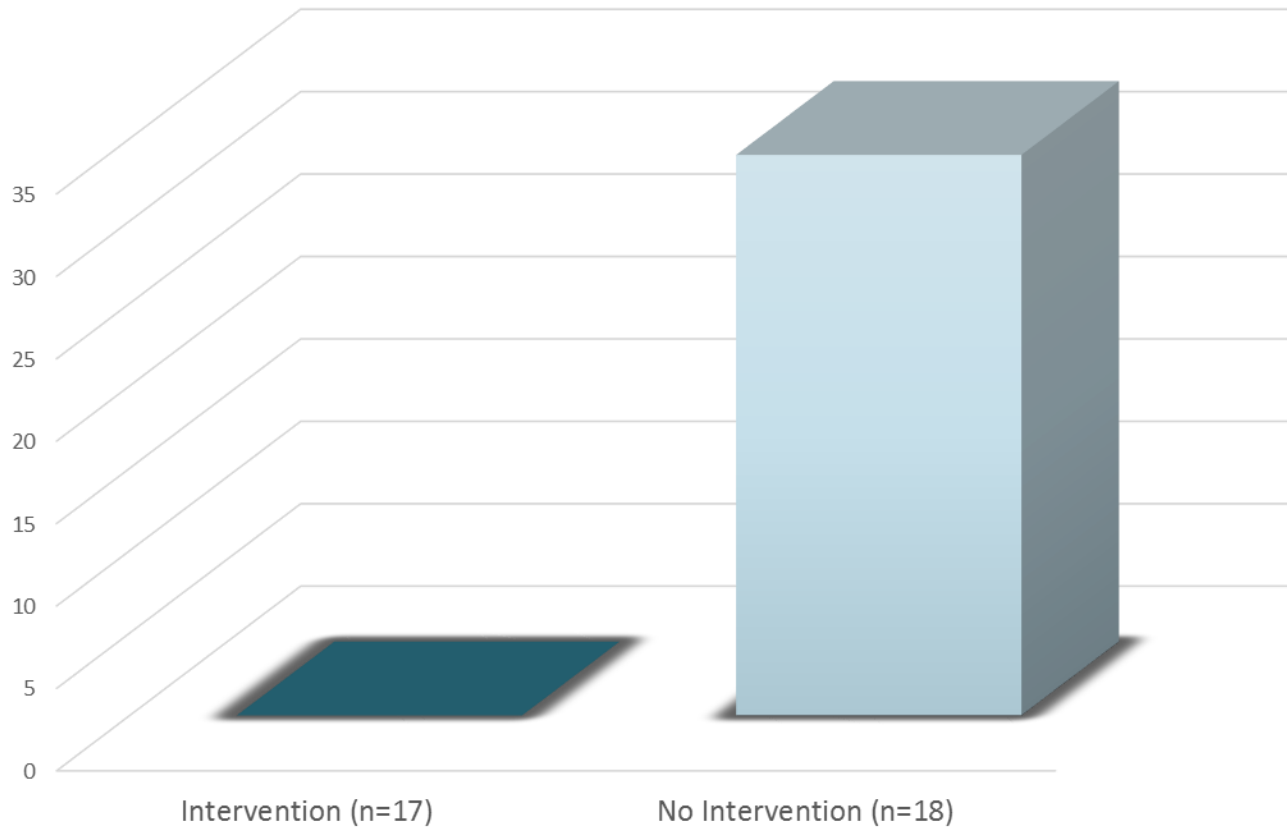
National Institute of  
Mental Health

Grant # RO1 HM114883

## Findings from ROSE RCT Trials

Population	Sample size	% with PPD: ROSE	% with PPD: usual care	Time to PPD
Pregnant women on public assistance	37	0%*	33%	3 mos.
Women on public assistance at risk for PPD	99	4%*	20%	3 mos.
Pregnant women on public assistance at PPD risk	205	16%*	31%	6 mos.
Afro-American women at risk for PPD	36	< depressive sx over time	No change in depressive sx	3 mos.
Pregnant adolescents	96	12.5%	25%	6 mos.
**p<.05 between conditions				

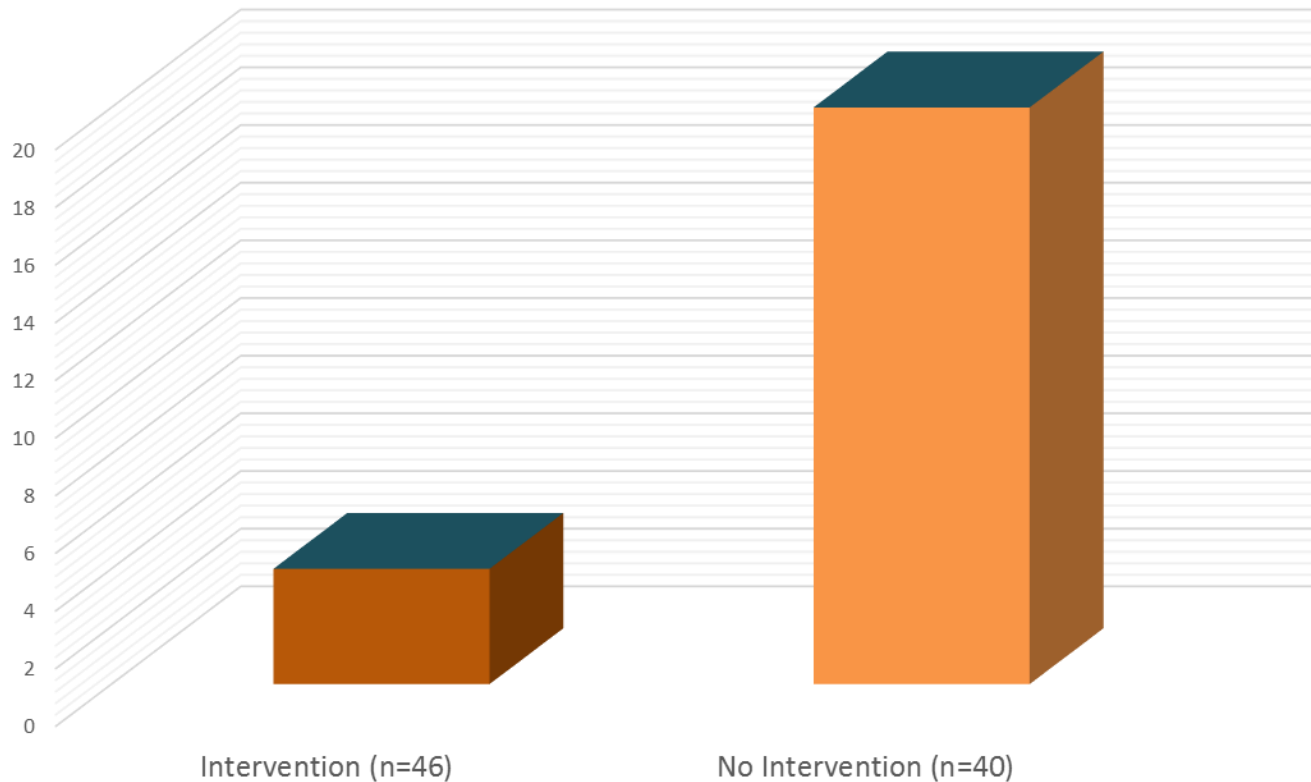
# Percent of Women with Depression Within 3 Months Postpartum



*Zlotnick et al (2001) Am J Psychiatry*

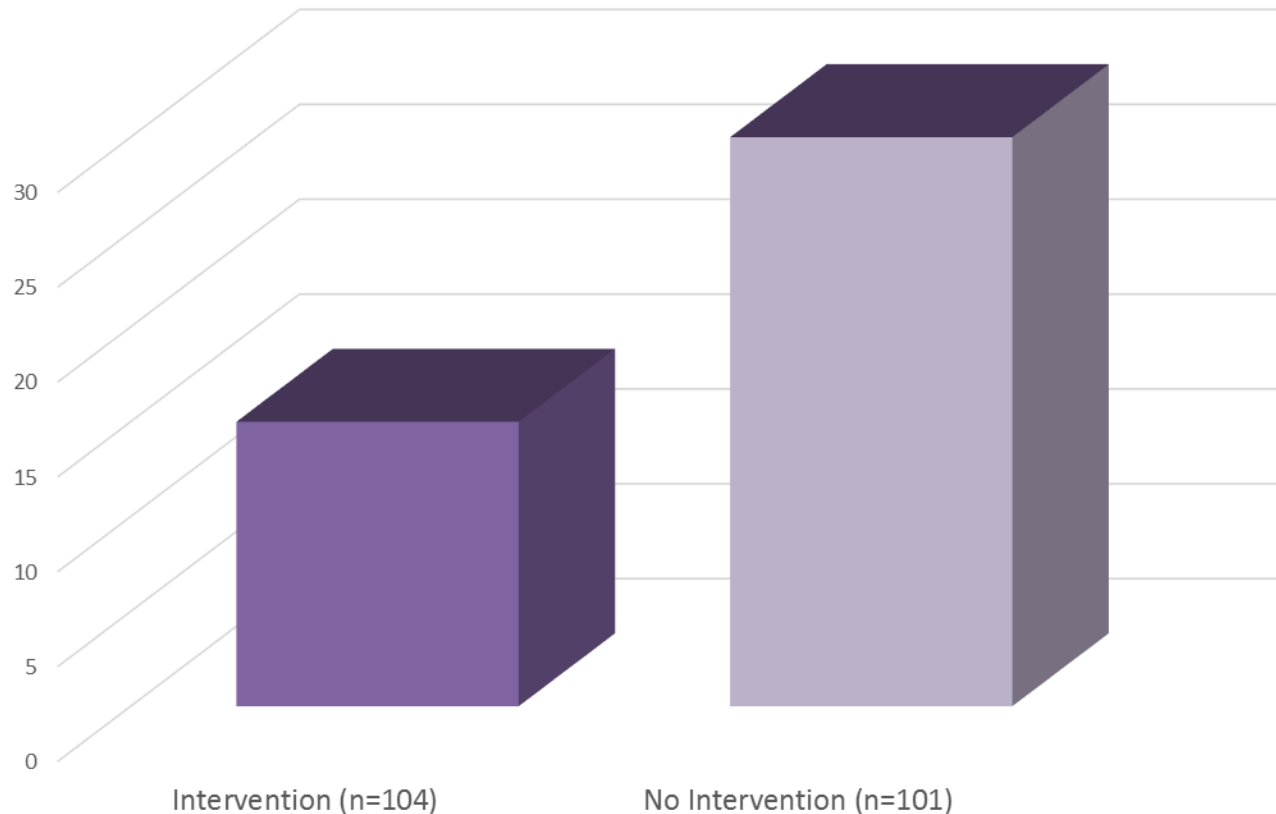


# Percent of Women with Depression Within 3 Months Postpartum



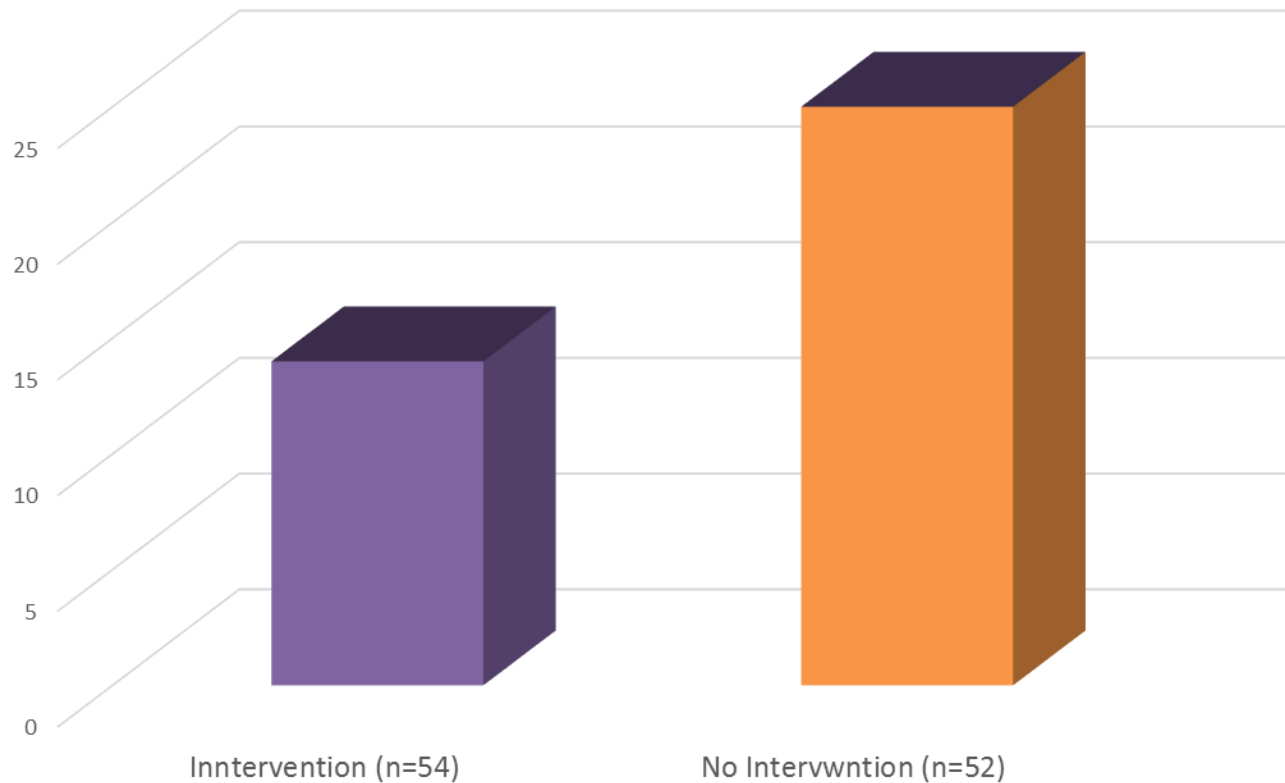
*Zlotnick et al (2006) Am J Psychiatry*

# Percent of Women with Depression Within 6 Months Postpartum



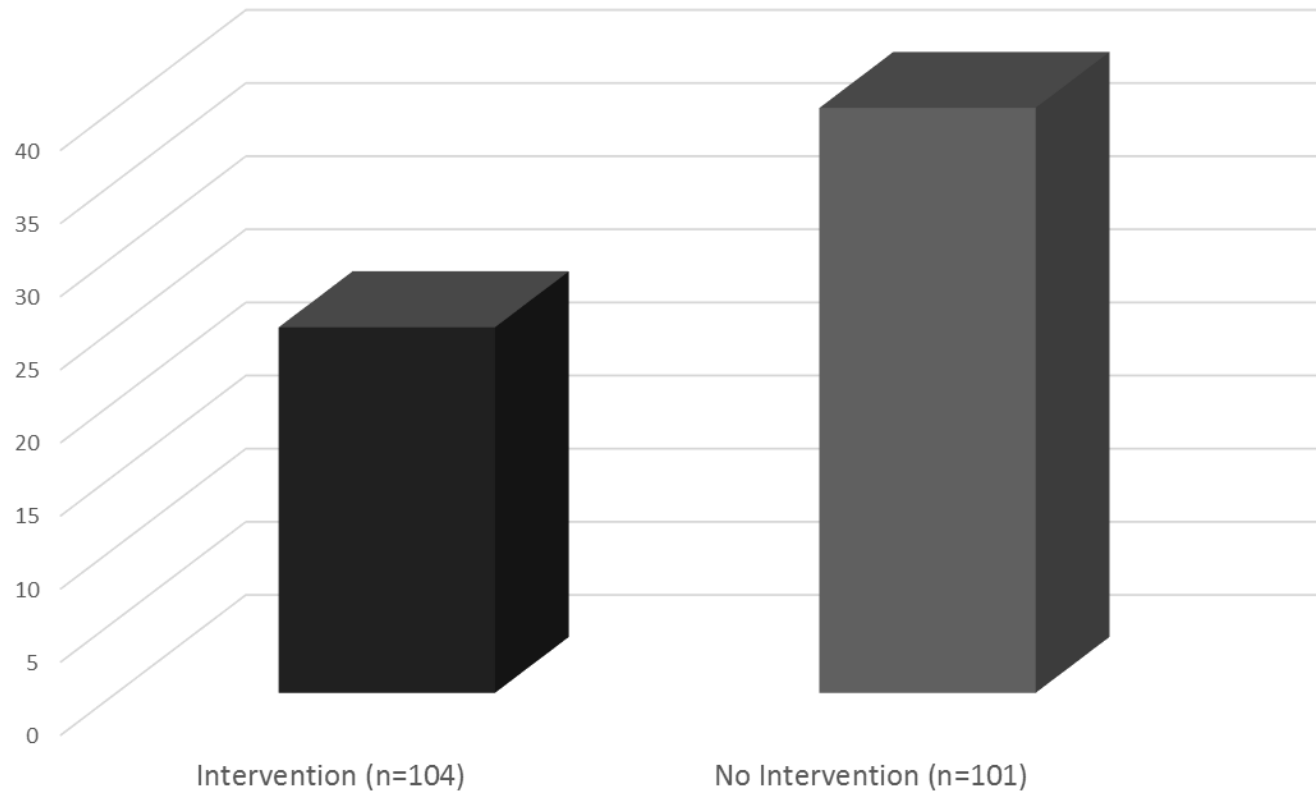
*Zlotnick et al, (2016) Journal of Affective Disorders*

# Percent of Teens with Depression Within 6 Months Postpartum



*Phipps et al. (2013) American Journal of Obstetrics & Gynecology*

# Percent of Women with Depression Within 12 Months Postpartum



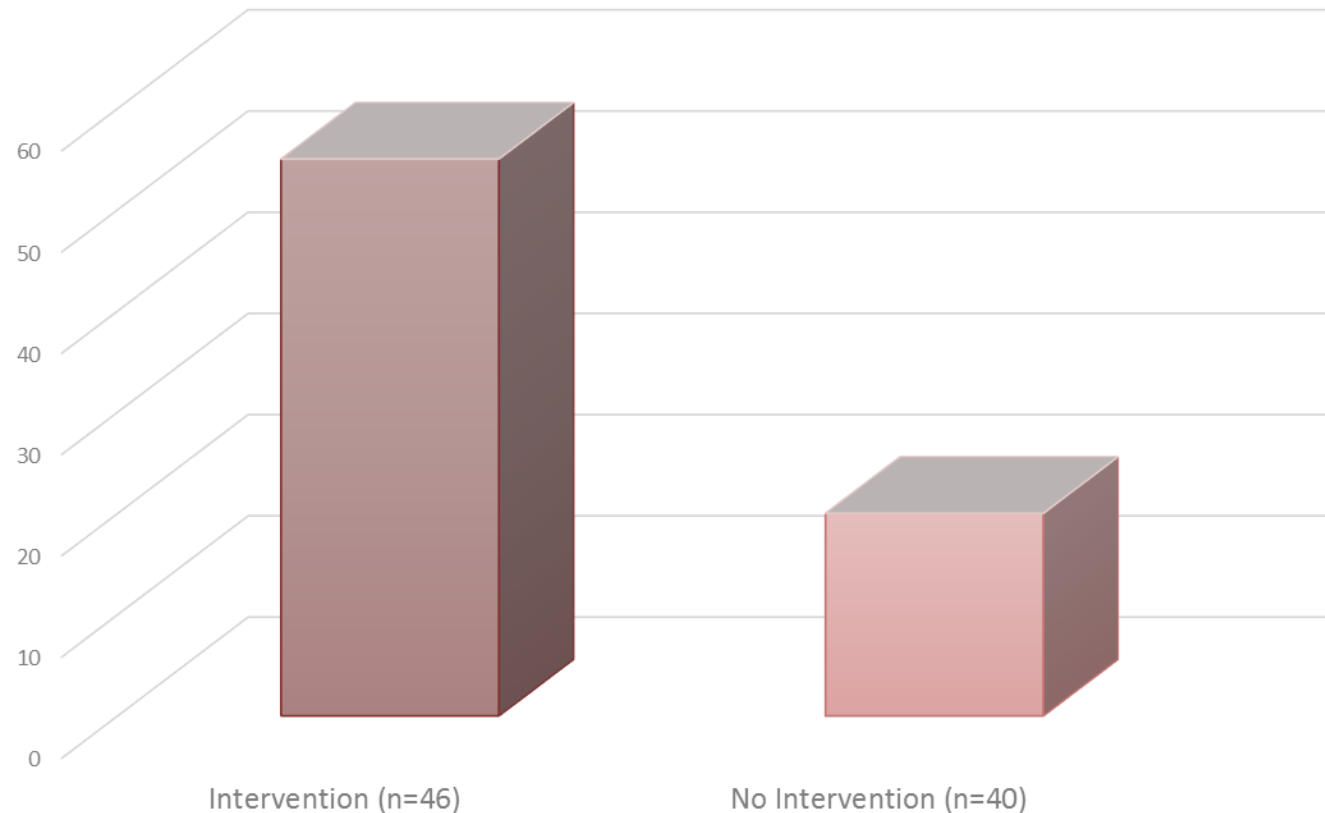
*Zlotnick et al, (Journal of Affective Disorders, 2016)*

# Other ROSE Study Findings

- On average, 3.5 sessions of 5 ROSE sessions were attended
- Within 3 months and 6 months postpartum, control condition participants used significantly more mental health treatment than ROSE participants (23% to 10%) (N=205)
- Independent ratings of adherence and competence of trained interventionists, including paraprofessionals, was adequate

\*\*\*\*Zlotnick, et al. Randomized controlled trial to prevent postpartum depression in mothers on public assistance. *Journal of Affective Disorders* 2016 Jan 1;189:263-8

# Median Days Breastfeeding at 3 Months Postpartum



*Kao et al (2012) International Journal of Group Therapy*