

Risk Factors Associated with Self-Reported Postpartum Depression in Hawaii, PRAMS 2012-2014

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Background

- ▶ Postpartum depression affects **11-20%** of women in the United States
- ▶ Postpartum depression can be disabling for the mother and limit her ability to care for her new infant resulting in increased use of health care services and more hospitalizations.
- ▶ Women who have postpartum depression are at greater risk for:
 - ▶ A relapse in subsequent pregnancies
 - ▶ Progress to or develop depression outside perinatal period

Background

- ▶ Past literature has identified several risk factors: prenatal depression, self-esteem, childcare stress, prenatal anxiety, life stress, marital status, socioeconomic status, unplanned/unwanted pregnancy, etc.
- ▶ Hawaii consists of diverse populations of Native Hawaiians, Asians, and Other Pacific Islanders that are not reported in the general literature.

Study Questions

- ▶ What are the risk factors associated with Self-Reported Postpartum Depressive Symptoms (SRPDS) in Hawaii?



Data Source

- ▶ 2012-2014 Pregnancy, Risk, Assessment, and Monitoring System (PRAMS)
- ▶ Provides surveillance data before, during, and after a live birth
- ▶ Mailed survey 2 months postpartum
 - ▶ Participants had up to 6 months after delivery to return the survey
 - ▶ Telephone follow up for non-respondents
- ▶ Weighted to reflect representative population
- ▶ Sample frame: Birth Certificate
- ▶ Overall Response Rate 65.4%

Statistical Analyses

- ▶ Sample Size (N=4276)
- ▶ Descriptive Statistics
- ▶ Multivariate Generalized Logit Analysis was conducted to determine risk factors associated with SRPDS
 - ▶ The model controlled for maternal race, pregnancy intendedness, intimate partner violence, prenatal depression, prenatal anxiety, and prenatal life stress.
 - ▶ Statistical analysis software: SAS 9.4 and R 3.3.1

Defining SRPDS

- ▶ 1) Since your new baby was born, how often have you felt down, depressed, or hopeless?
 - ▶ Always, often, sometimes, rarely, never
- ▶ 2) Since your new baby was born, how often have you had little interest or little pleasure in doing things?
 - ▶ Always, often, sometimes, rarely, never

SRPDS = “Always” or “Often” selection to either question

Possible SRPDS = “Sometimes” to either question and did not answer “Always” or “Often”

Distribution of SRPDS

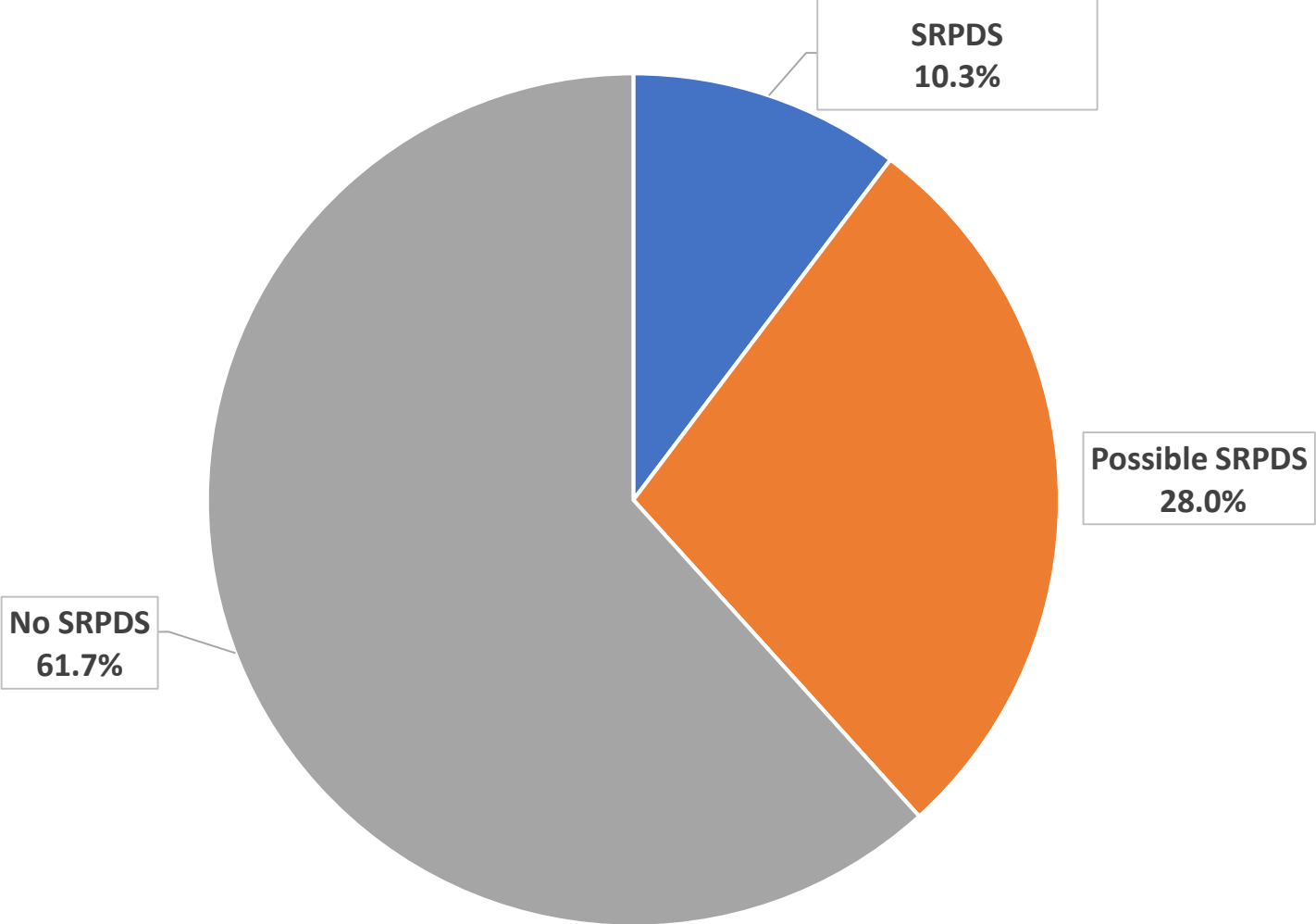
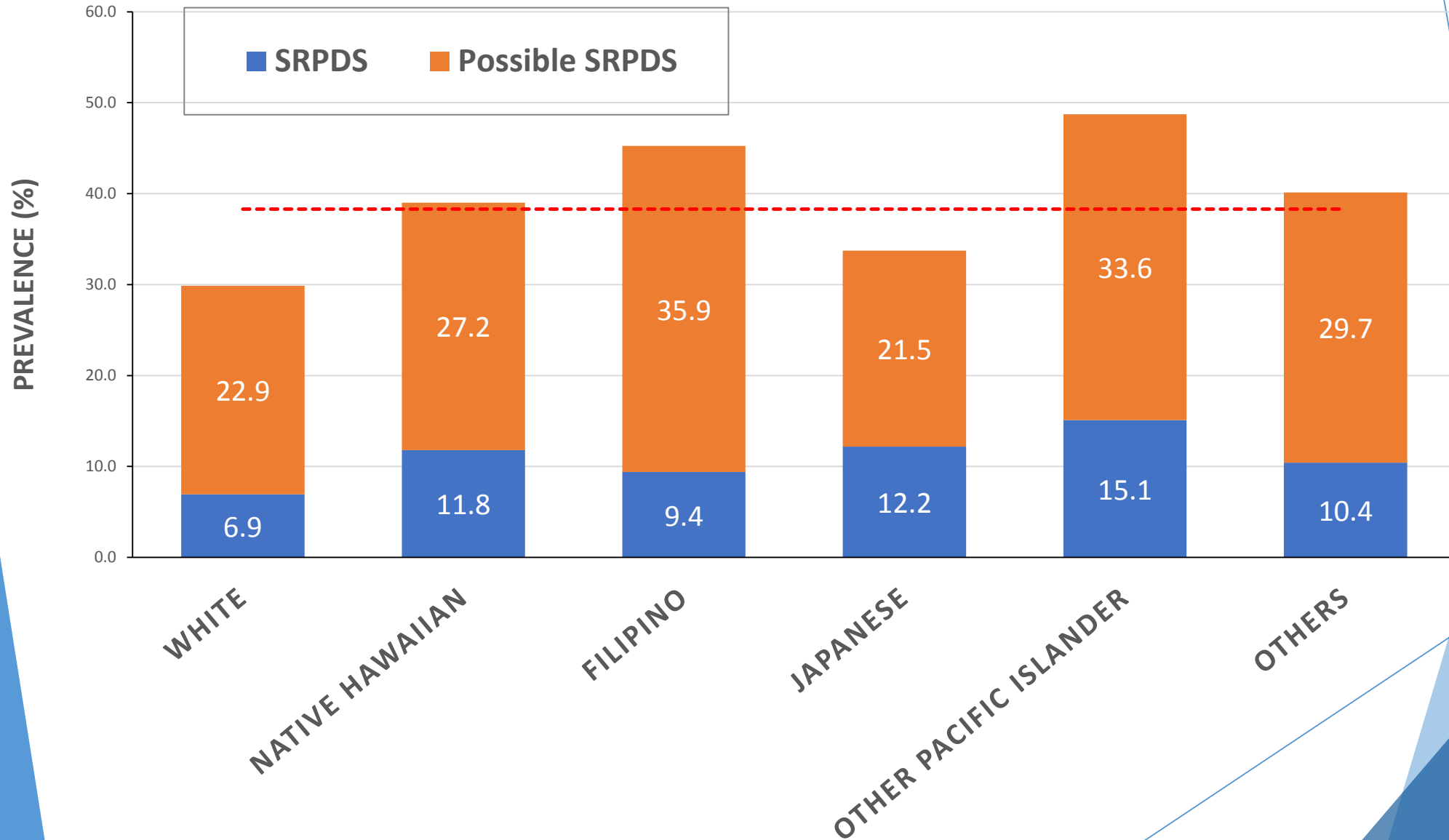
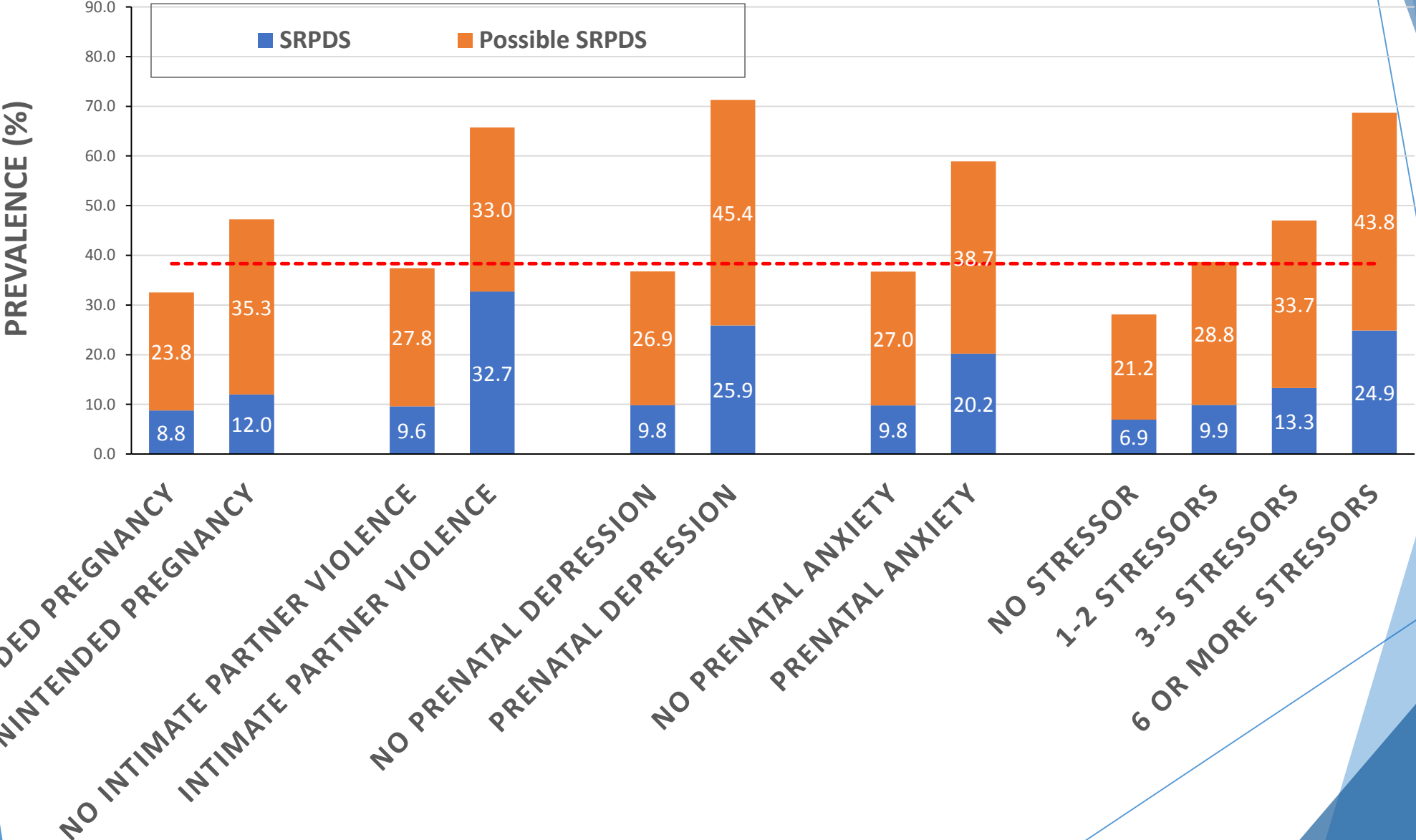


Figure 1: Weighted Percentage of SRPDS

SRPDS and Possible SRPDS by Socio-demographic Characteristics



SRPDS and Possible SRPDS by Socio-demographic Characteristics



Results: Crude and Adjusted Odds Ratios of SRPDS (Part I)

Effect	Crude OR	Adjusted OR
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Maternal Race (Reference= White)

Native Hawaiian

1.96

1.70

Filipino

1.74

2.01

Japanese

1.86

2.28

Other Pacific Islander

2.98

1.97

Others

1.76

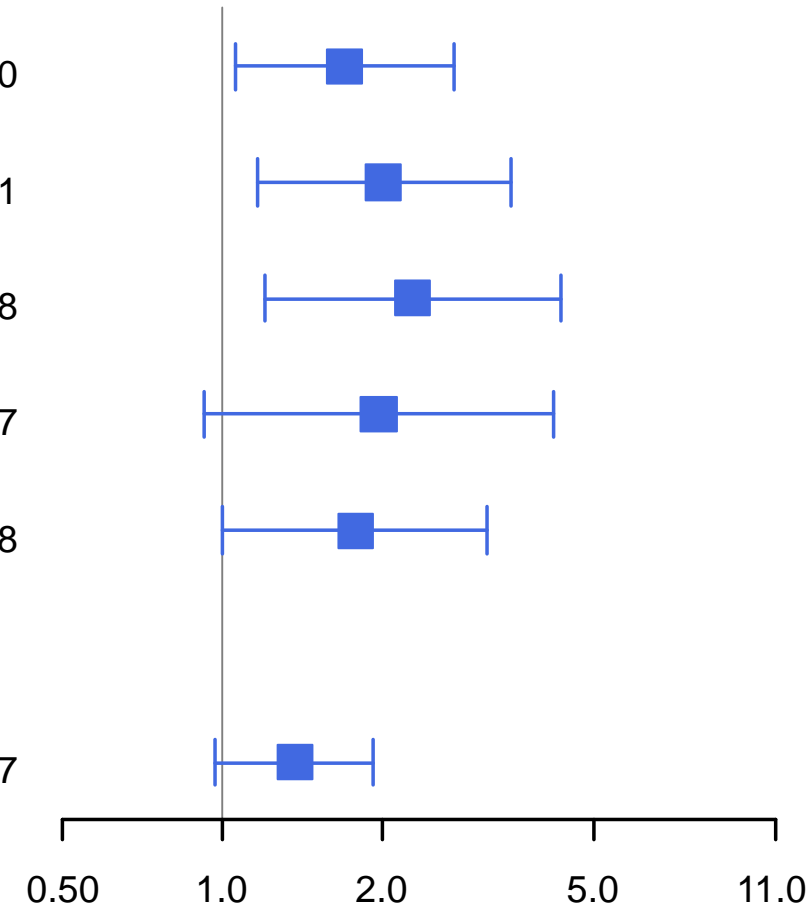
1.78

Pregnancy Intendedness (Reference=Intended Pregnancy)

Unintended Pregnancy

1.75

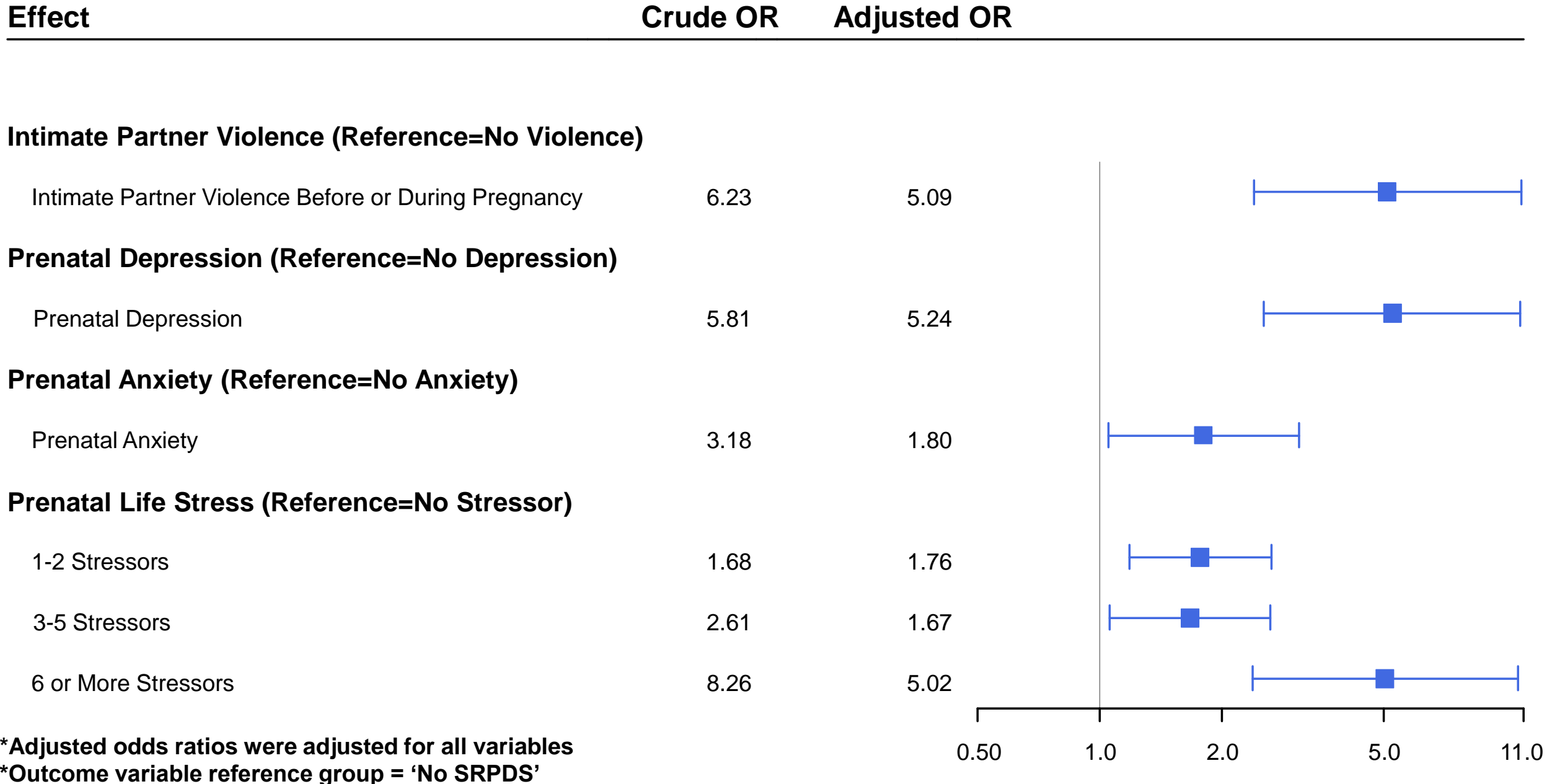
1.37



*Adjusted odds ratios were adjusted for all variables

*Outcome variable reference group = 'No SRPDS'

Results: Crude and Adjusted Odds Ratios of SRPDS (Part II)



Results: Crude and Adjusted Odds Ratios of Possible SRPDS (Part I)

Effect

Crude OR Adjusted OR

Maternal Race (Reference= White)

Native Hawaiian

1.37

1.32

Filipino

2.00

2.79

Japanese

0.99

1.39

Other Pacific Islander

2.01

2.11

Others

1.52

1.69

Pregnancy Intendedness (Reference=Intended Pregnancy)

Unintended Pregnancy

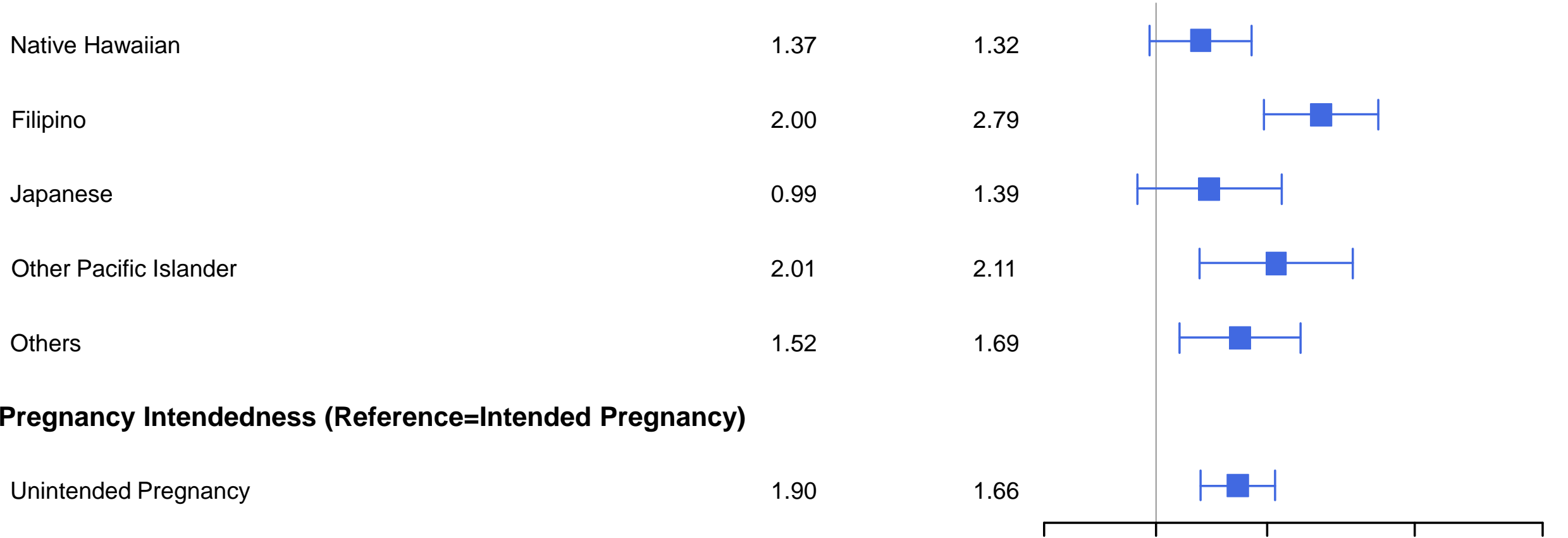
1.90

1.66

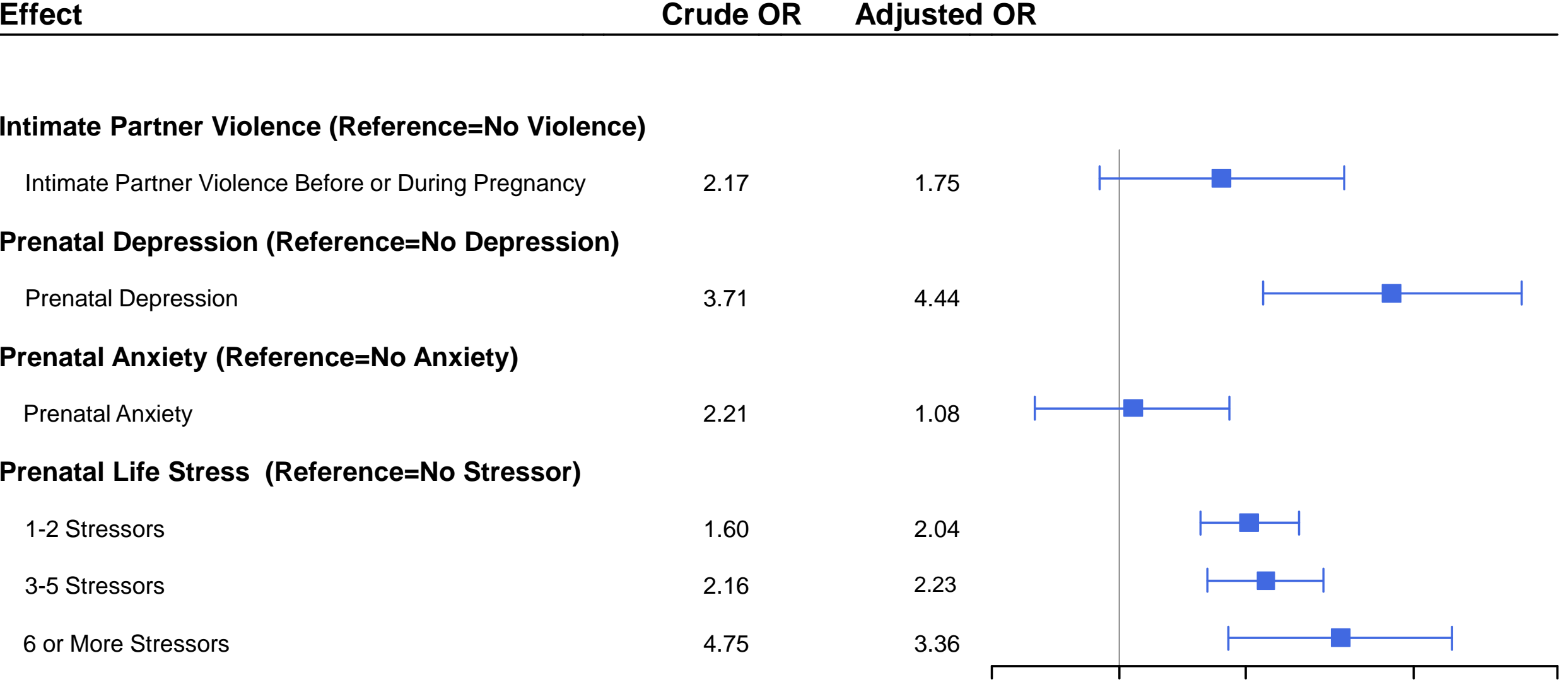
0.50 1.0 2.0 5.0 11.0

***Adjusted odds ratios were adjusted for all variables**

***Outcome variable reference group = 'No SRPDS'**



Results: Crude and Adjusted Odds Ratios of Possible SRPDS (Part II)



*Adjusted odds ratios were adjusted for all variables

*Outcome variable reference group = 'No SRPDS'

Limitations

- ▶ Based on self-report nature of the questions about SRPDS, alcohol and drug use, intimate partner violence, prenatal depression, anxiety etc.
- ▶ Pregnancy intention may change during the period from conception through postpartum
- ▶ PRAMS survey measures postpartum depression only based on two questions
- ▶ Multiple race was not accounted for

Conclusions-SRPDS

Based on the PRAMS 2012-2014 data:

- ▶ Nearly 40% of the mothers have self-reported post-partum depression symptoms in Hawaii (10.3% SRPDS, 28.0% possible SRPDS)
- ▶ Mothers who were more likely to suffer from SRPDS tend to be
 - ▶ Native Hawaiian, Filipino, and Japanese;
 - ▶ Those who experienced intimate partner violence before or during pregnancy, suffered from prenatal depression, anxiety, and life stress.
 - ▶ Intimate partner violence, prenatal depression, and those with 6 or more stressors appeared to have more prominent effects than race

Conclusions-Possible SRPDS

- ▶ Mothers with possible SRPDS tend to be
 - ▶ Filipino, Other Pacific Islander, those with unintended pregnancy, prenatal depression and life stress.
- ▶ These findings suggest the importance of clinical screening and appropriate follow up for postpartum depression for these higher risk groups.

Questions?

For additional questions or comments, please contact:

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"I'm afraid I can't change his nappies, Yvonne.
I have Postnatal Depression."