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- WHAT DO WE REALLY KNOW ABOUT THE ROLE OF VIOLENCE ON NEWBORN OUTCOMES IN LESS DEVELOPED SETTINGS?



VIOLENCE DURING PREGNANCY AND LOW BIRTH WEIGHT: A COHORT STUDY IN SOUTHERN BRAZIL

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BACKGROUND

BRAZIL (200 million inhabitants)

- 45 million women in childbearing age
- Parity is 1.97 per women

BACKGROUND

VIOLENCE IN PREGNANT WOMEN IN BRAZIL

- Prevalence -23.9% (Reichenhein et al, 2000)
- Violence is not part of the antenatal care protocol

BACKGROUND

- Violence during pregnancy was associated with risk of deleterious infant outcomes (i.e. low birth weight , miscarriage and fetal distress) (Campbell et al, 1999; Leung et al, 2001; Rosen et al, 2007, Ferri et al, 2007)
- Low birth weight (LBW) is a major source of infant mortality and long-term adverse health outcomes for children (Cokkinides et al, 1999)

CONTEXT

- Only few studies have examined the prevalence of violence during pregnancy, and the impact of maternal experience of violence on neonatal outcomes using a prospective design in primary care settings, and none have controlled for mental health

OBJECTIVES

- To estimate lifetime and during pregnancy prevalence of violence
- To identify demographic, obstetric and behavior characteristics of those most at risk
- To assess the impact of violence during pregnancy on newborn outcomes

DESIGN, SETTING AND PARTICIPANTS

- Prospective cohort of 653 pregnant women between the 16th and 36th week of gestation who attended primary care, and were followed up until the immediate postnatal period in southern Brazil

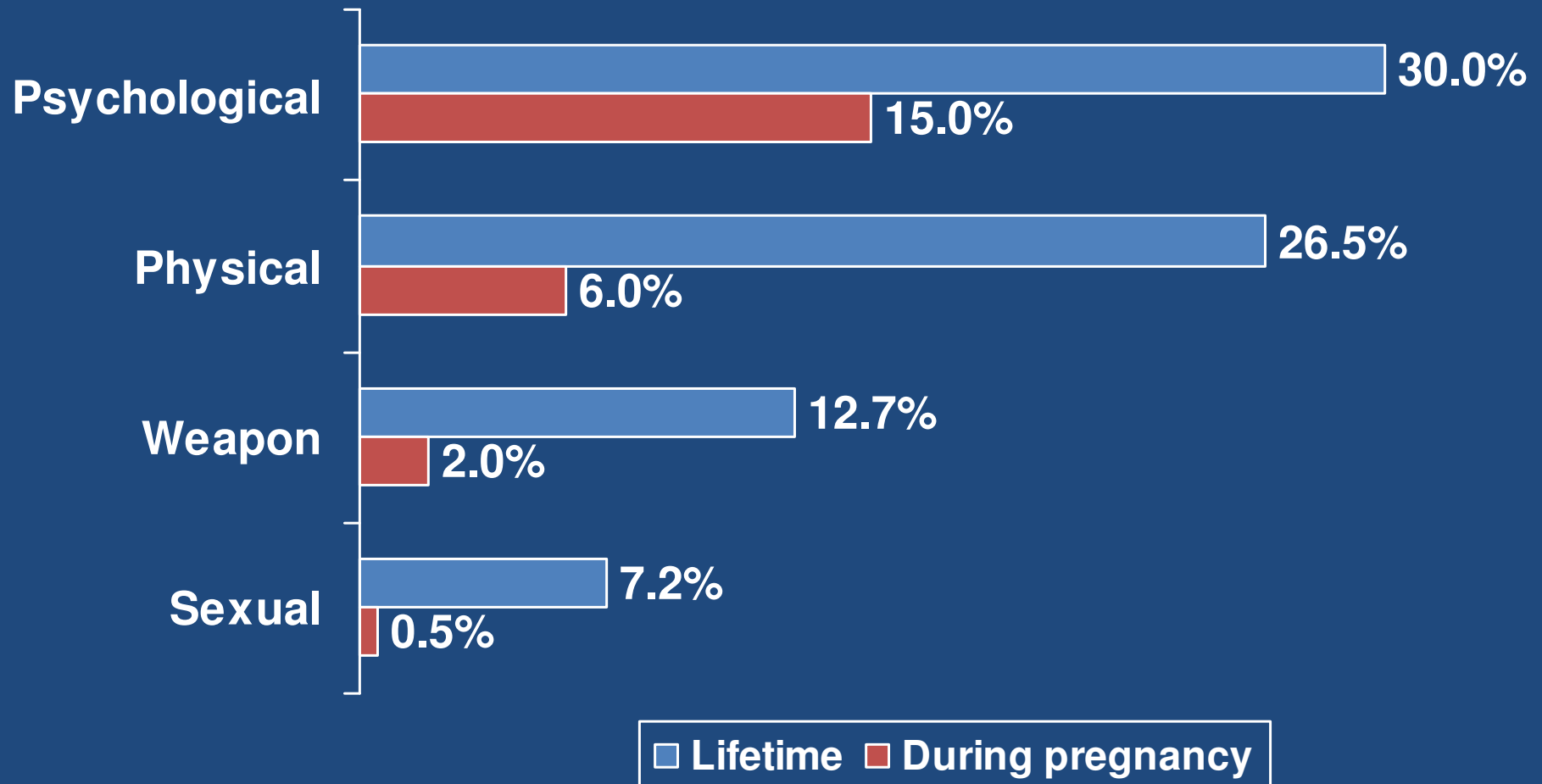
PROCEDURES

- Questionnaire:
 - Eating Habits and Behavior, Mental Health and Violence
 - Experience of violence - self-report questionnaire adapted from the Abuse Assessment Screen instrument
 - Classification of type of violence: psychological, physical, with weapon and sexual abuse
- Psychiatric morbidity- Primary Care Evaluation of Mental Disorders (PRIME-MD) for screening and diagnosing mental disorders in primary care(depression= 5 or more symptoms)

SAMPLE

- Age – between 20-29 years old (50%)
- Education – 63% < than 8 years
- Unemployed – 59%
- Family Income – 70% < than U\$500/month
- Number of people in the household – 32% > than 5 people
- No planned pregnancy - 62%

PREVALENCE OF VIOLENCE



RESULTS

- Violence was more frequent among :
 - Very low income women
 - Did not plan current pregnancy (borderline significance)
 - Took adverse substances (including tobacco)
 - Insufficient weight gain during pregnancy
 - Those reporting depressive symptoms

NEWBORN OUTCOME

- 8.7% (n=57) babies had LBW
- LBW was more common among women who reported suffering violence during pregnancy

RESULTS

- Newborns with LBW were:
 - three times more common among women experiencing physical violence during pregnancy (RR,3.06;95% CI, 1.28-7.29)
 - twice as frequent among those experiencing both psychological and physical violence (RR,2.10;95% CI, 1.13-3.90)

RESULTS

- These findings were independent of other risk factors for LBW such as
 - Family income
 - Weight gain during pregnancy
 - Number of prenatal visits
 - Preterm delivery

LIMITATIONS

- Recall bias (information)
- Instrument screening- mental health measure-
PRIME-MD
- Small numbers of LBW

SUMMARY

- Our findings clearly show that:
 - There is an independent association of violence with neonatal birth weight
 - The association between depressive symptoms (highest quartile) and LBW was not apparent

SUMMARY

- Importance of detecting women experiencing violence during prenatal care so that appropriate interventions can be implemented
- Mothers exposed to violence during pregnancy should be also monitored closely for weight gain, fetal growth and psychological status to assure a successful pregnancy and a healthy newborn