

# Sleep quality and its impact on the mental health of pregnant women in southern Brazil

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*Pregnant women with poor/very poor sleep quality were over twice more likely to have anxiety and depressive symptoms, and had a 230% higher prevalence of stress, highlighting the critical role of sleep in maternal mental health.*

## BACKGROUND

Sleep plays an essential role in physical and mental well-being, particularly during pregnancy, a period marked by significant physical and emotional changes. Despite its importance, the impact of sleep quality on the mental health of pregnant women remains underexplored, particularly in low-income settings. This study investigates the relationship between sleep quality and mental health outcomes, such as anxiety, stress, and depressive symptoms, among pregnant women from a city in southern Brazil, aiming to fill this gap in the literature.

## METHODS

This cross-sectional study was conducted from April to December 2022, with pregnant women ( $\geq 18$  years old) receiving prenatal care in Basic Health Units during their third trimester. Self-reported sleep quality was categorized as very good/good, regular, or poor/very poor. The outcomes measured were depressive symptoms, stress, sadness, and anxiety. Data collection involved face-to-face interviews using a structured questionnaire. Adjusted analysis was performed to evaluate the associations between sleep quality and mental health outcomes.

## RESULTS

A total of 428 pregnant women participated in the study. The prevalence of poor/very poor sleep quality was 23.1%, 34.3% of the participants reported anxiety, 36.4% stress, 8.6% suicidal ideation, and 50.9% had depressive symptoms. Those with poor/very poor sleep quality were 2.32 times more likely to have anxiety compared to those with very good/good sleep quality. The prevalence of stress was 230% higher among women with poor/very poor sleep quality. Additionally, women with poor/very poor sleep quality were 2.45 times more likely to have depressive symptoms compared to those with very good/good sleep quality.

## RESULTS CONTINUED

Figure 1. Prevalence (%) of mental health variables of the pregnant women studied. Criciúma, Santa Catarina state, Brazil, 2022. (n=428)

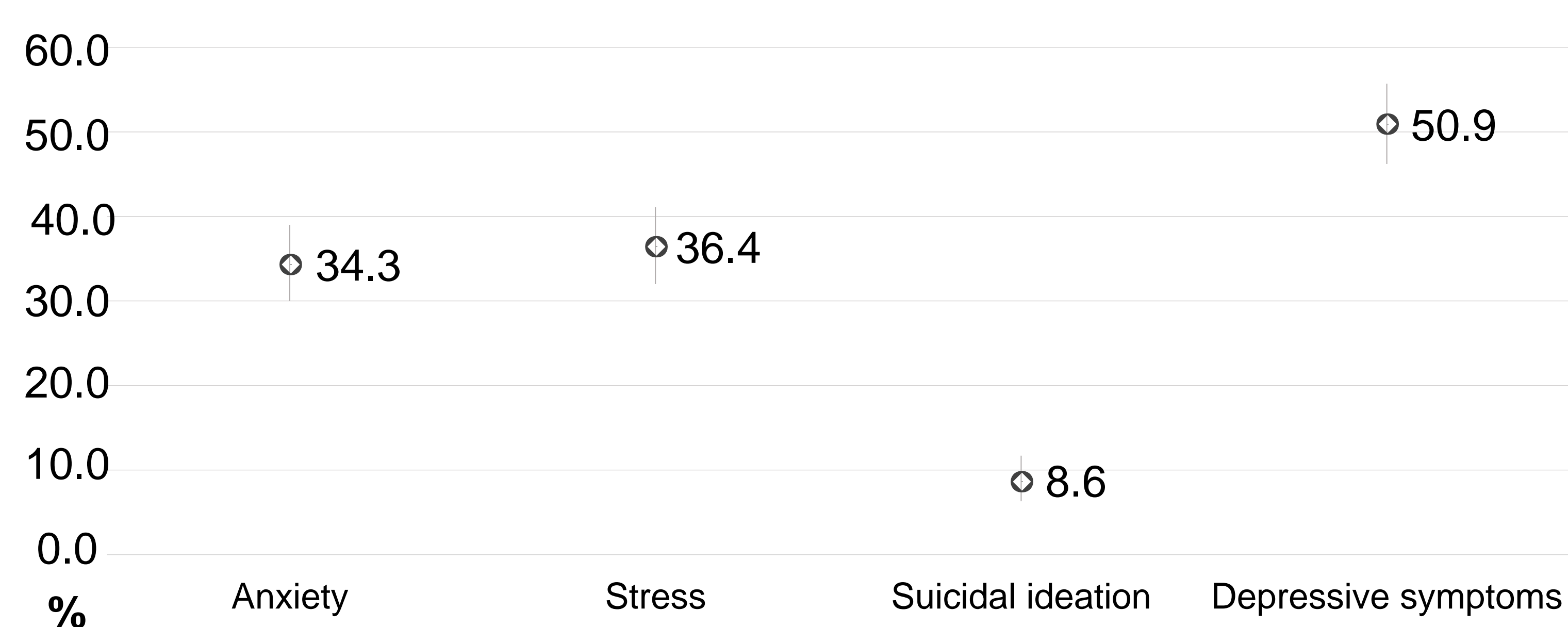
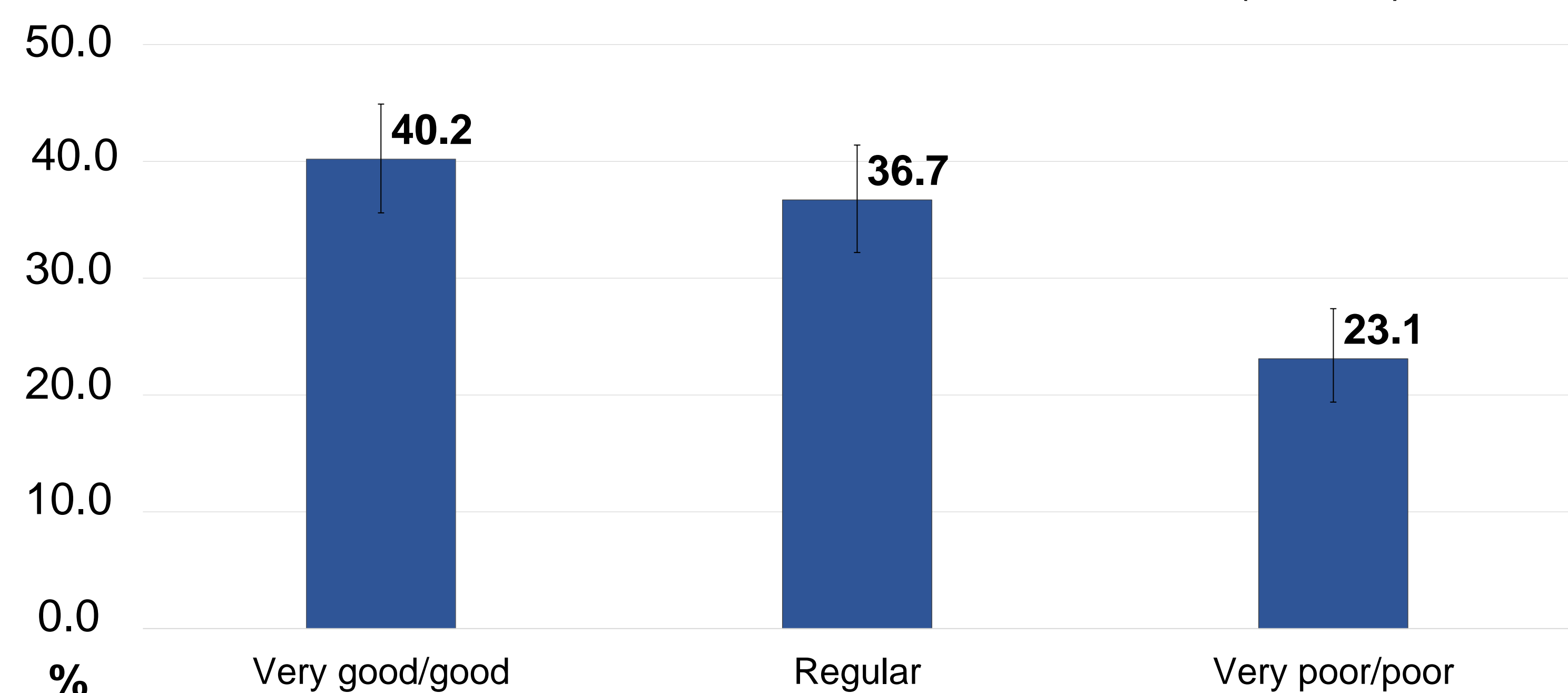


Figure 2. Prevalence (%) of sleep quality of the pregnant women studied. Criciúma, Santa Catarina state, Brazil, 2022. (n=428)



## CONCLUSIONS

These results indicate a significant burden of mental health issues among pregnant women, highlighting the importance of sleep quality as a contributing factor. These findings underscore the critical need for health interventions that address both behavioral and mental health aspects to provide comprehensive care for pregnant women. Addressing poor sleep quality could play a significant role in mitigating mental health issues such as anxiety, stress, and depression, ultimately improving the overall well-being of pregnant women and their babies. Integrating sleep quality assessments and mental health support into prenatal care programs is essential for enhancing maternal and fetal health outcomes.

## ADDITIONAL KEY INFORMATION

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