

05B. EDUCATION: PREGNANCY AND THE NEONATE

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PREVALENCE OF GARDNERELLA VAGINALIS AND BACTERIAL VAGINOSIS IN PORTUGUESE PREGNANT WOMEN

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Background

Bacterial vaginosis (BV) is an important risk factor associated to many pregnancy complications, such as preterm labor and perinatal infections. Vertical transmission of BV-associated bacteria such as *Gardnerella vaginalis* can occur during delivery and can cause several neonatal infections and jeopardize the newborns survival. Here, we determined *G. vaginalis* and BV prevalence in Portuguese pregnant women and correlated the data with sociodemographic, medical, reproductive and behavioral factors.

Methods

This study involved 206 pregnant women attending two public hospitals in the North region of Portugal. BV was defined by a Nugent score equal or higher than 7 and *G. vaginalis* presence was confirmed by polymerase chain reaction. Epidemiological data were collected regarding age, gestational trimester, educational level, history of previous BV, pregnancy, premature birth, chronic diseases, smoking, vitamin supplements and intimal hygiene products use.

Results

The prevalence of *G. vaginalis* and BV among Portuguese pregnant women was 67.48% and 3.88%, respectively. A higher risk of *G. vaginalis* colonization was found in women with basic educational level (odds ratio (OR)= 2.77; 90% confidence interval (CI)= 1.50-5.13), in second trimester of pregnancy (OR= 6.12; 90% CI= 2.19-17.12) and smokers (OR= 2.96; 90% CI= 1.17-7.51). Conversely, history of chronic disease (OR= 3.80; 90% CI= 1.09-13.25) and previous premature birth (OR= 5.17; 90% CI= 1.24-21.59) were identified as BV risk factors in pregnancy.

Conclusions

Our findings showed that BV prevalence is low but *G. vaginalis* colonization is high among Portuguese pregnant women, possibly increasing health risks for the mother and the newborns. Furthermore, BV was significantly associated with a history of chronic disease and previous premature birth.

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