**TITLE:** SEROPREVALENCE OF SYPHILIS IN WOMEN FROM VITORIA DA CONQUISTA (BAHIA).

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## **ABSTRACT:**

Syphilis presents a diverse prevalence when distinct aspects are considered such as geographic and spatial diversity as well as population group most affected by this disease. Thus, a local epidemiological evaluation is necessary, especially when the population group is considered. These studies are essential to guide clinical procedures, to allocate resources, to elaborate intervention plans. Therefore, this study reports a seroepidemiological characterization of *Treponema pallidum* among women being seen in family Health Units (FHU) in the city of Vitoria da Conquista, Bahia – Brazil. This is characterized as a cross-sectional study. It was composed of 294 samples from women in the city of Vitoria da Conquista, Bahia – Brazil. Clinical and demographic data were obtained. Further, serologic analyses were performed from the blood samples as well as the cytokine dosages. This study identified a seroprevalence of 3.74% (11 samples) for the disease. The prevalent age range was between 26 and 35 years old (29.9%), living mostly in urban areas (75.5%), brownish skin color (57.9%) and incomplete primary education (38.1%). The women reported that they had only one sexual partner in their lifetime (47.3%) while others reported having no stable relationship (78.9%) and active sexual life (90.8%). Most of the women reported having never used condoms and having a previous history of an STD (71.1%). An average of 3 pregnancies was reported by these women, as well as previous miscarriage (24.1%) and premature birth (5.1%). Although there were no significant statistic for the latter two, they appeared to be possible risk factors that could easily identified in larger populations. Regarding the dosage of IL-1 $\beta$ , IL-6 and TNF-α, there was no significant statistical difference between case and control groups. Possibly, the production of cytokines is transient, which could make their detection difficult at the moment of evaluation. Women attending FHUs stand out as a population having a high prevalence of syphilis and high risk of acquiring STDs. That is probably due to difficult access to health services and unprotected sex. The use of several non-treponemal diagnostic tests for screening and conducting confirmatory treponemal tests is stressed as important since they present different sensitivity.

Keywords: Treponema pallidum. Syphilis. VDRL.

**Development agency:** FABESB/CNPQ.