



**Tipo de trabalho:** RESUMO SIMPLES (MÁXIMO 2 PÁGINAS)

## **PROFILE OF INFLAMMATORY CYTOKINES IN COLOSTRUM IN NURSING MOTHERS AT THE EXTREMES OF REPRODUCTIVE AGE<sup>1</sup>**

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**Introduction:** The gestation at the extremes of reproductive ages is characterized as High Risk. The colostrum is the first milk secretion produced and contains the necessary nutrients for the development of the newborn. **Objective:** To compare the concentration of IL-1 $\beta$ , IL-6, IL-8, and TNF- $\alpha$  cytokines of adolescent and advanced maternal age mothers colostrum, and to describe demographic, gestational and perinatal socioeconomic characteristics. **Patients and Methods:** A cross-sectional study, which included 117 adolescent nursing mothers (up to 24 years of age), 158 nursing mothers of the control group (25 to 34 years), and 39 nursing mothers with advanced maternal age (over 35 years of age) attending the Maternity Hospital of Presidente Prudente. The colostrum samples were obtained by manual milking between 48 and 72 hours post childbirth. The cytokine determination was performed by immunoenzymatic assay (ELISA). The socio-demographic and gestational variables were analyzed by the X<sup>2</sup> test and the cytokines by the Kruskal-Wallis test, followed by the Dunn test, and the significance level was 5%. **Results:** The median age in nursing mothers with advanced maternal age was 37 years, statistically superior to the 20-year-old female adolescents. The stable union prevailed among the groups and 81.2% of the adolescent nursing mothers did not exercise gainful activity. In 69.2% of the nursing mothers with advanced maternal age the route of birth was cesarean section and in this group the gestational body mass index (BMI) was higher. The concentration of IL-1 $\beta$  and IL-6 was high in colostrum of mothers with advanced age compared to adolescent mothers, but did not differ from the control group. **Conclusions:** The maternal age influenced the socio demographic, gestational and perinatal characteristics of the nursing mothers, as well as the composition of colostrum cytokines.