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BOOK OF ABSTRACTS

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A study of meningitis case numbers in the state of Goiás - Brazil

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This study aimed to analyze the time series of monthly cases of meningitis in the state of Goiás, Brazil, to detect possible seasonal and trend elements present in the series. Meningitis is an inflammatory process of the meninges - membranes surrounding the brain - caused by various infectious agents such as bacteria and viruses. Since the series is composed of count values of meningitis cases in the state of Goiás, traditional ARMA models (Box et al., 2015) are not suitable for this type of data analysis. Therefore, it is necessary to use more general models, such as the Generalized Autoregressive Moving Average (GARMA) models, proposed by Benjamin et al. (2003); they are an extension of ARMA models that use the results of Generalized Linear Models (Mccullagh e Nelder, 1989) when the data distribution belongs to the exponential family. The data analyzed are the monthly records of confirmed meningitis cases from 2007 to 2019, resulting in 144 observations. Without a clear seasonal pattern indicates the endemicity of the disease. Although, a decreasing trend of new cases in recent years.

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Selection of variables in proportional data, analysis of disparate and exploratory data on food insecurity, housing conditions and vulnerability

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According to the UN (United Nations) 2021, between 720 and 811 million people faced malnutrition in 2020, which corresponds to something between 9.2% and 10.4% of the world's population.