Quality of life domains associated with health perception in the elderly: comparison of the Logistic Regression model with the Poisson Regression model

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Abstract: The objective of the present study was to analyze the association between negative health perception and WHOQOL-BREF and WHOQOL-OLD domains scores lower than the median and to compare the multiple logistic regression model with the multiple Poisson regression model. In the elderly population of four ICC in the city of Cuiabá-MT with a sample of 317 elderly. The main dependent variable was health perception, assessed through the WHOQOL-BREF with the following question: How satisfied are you with your health? The independent variables were the WHOQOL-BREF and WHOQOL-OLD domains scores lower than the median. Gross odds ratios and gross prevalence ratios. To verify the normal distribution of domain score data, the Shapiro test was used, identifying that these scores were not symmetric. Due to this, for the data analysis, a bivariate categorical analysis using crude odds ratio and crude prevalence ratio and a categorical multiple analysis using binary logistic regression and Poisson regression was considered. In this study, both models were adequate to the data, however the Poisson model was more accurate than the logistic model and with these models it was found that the domains that together presented risks in the perception of negative health were: the scores of the physical and past, present and future activities; both smaller than the median.

Keywords: Quality of life; health perception; old man; logistic regression; Poisson regression.

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