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PREVALENCE OF SELF-REPORTED CONSTIPATION AND ASSOCIATED FACTORS IN GENERAL ADULT BRAZILIAN POPULATION

Hypothesis / aims of study
The current study is a population-based study that aimed to estimate the prevalence of self-reported constipation and factors associated to this occurrence in adults in the urban population of a Southern city in Brazil.

Study design, materials and methods
This is a secondary analysis of a cross-sectional, descriptive, exploratory and epidemiological population-based study about bowel habits of a Brazilian urban population, performed in 2008. After approval by the Ethics Committee, 2162 individuals residing in the selected Londrina´s streets through cluster sampling and who met the inclusion criteria were interviewed using two instruments: social-demographic data and the Brazilian version of "Bowel Function in the Community" tool. All participants of the study were informed about the research aims and procedures and signed an informed consent form. In the present study, self-reported constipation and associated factors were retrieved from the database of the original study and analyzed through univariate and multivariate logistic regression. All individuals who replied to the question number 14 of the "Bowel Function in the Community" tool were included in the present study sample. The prevalence of constipation was estimated with a 95% confidence interval. To establish the relationships between the socio-demographic and clinical variables and between all of the significant variables, three multivariate analysis models were developed: a general model, with all the constipated individuals; and two stratified models for gender. The quality and the discriminating power of the adjusted models were analyzed by means of the C-statistics (statistics of the test related to the value of the areas under the ROC curve) for each of the three models performed.

Results
The total prevalence of self-reported constipation was 25.2%, higher among women (37.2%) compared to men (10.2%). The factors that presented stastiscally significant association to the constipated sample (n = 546) were: female gender (ORadj: 4,8; IC 95%: 3,8- 6,2), higher age (75 to 100 years old) (ORadj:1,8; IC 95%: 1,0 – 3,2); ethnicity (ORadj: 1,2; IC 95%: 0,8-1,8); fistula (ORadj: 2,9; IC 95%: 1,1- 7,9); anal fissure (ORadj: 1,8; IC 95%: 1,1- 3,0); hemorrhoids (ORadj: 1,9; IC 95%: 1,4 – 2,6), anorectal surgery (ORadj: 2,2; IC 95%: 1,2 – 6,0); trauma or wound around the anus (ORadj: 2,6; IC 95% 1,2 – 6,0); nervous system disease (ORadj: 1,9; IC 95% 1,4 – 2,6); and stroke (ORadj: 3,9; IC 95%: 1,7 – 9,6). Among women, the statistically significant associated factors were: ethnicity (black/brown) (ORadj: 1,3; IC 95%: 0,8 – 2,1); higher age (75 to 100 years old) (ORadj: 0,8; IC 95%: 0,4 – 1,5); anal fissure (ORadj: 2,8; IC 95%: 1,7- 4,7); anorectal surgery (ORadj: 2,6; IC 95%: 1,3 – 5, 2); trauma or wound around the anus (ORadj: 3,7; IC 95%: 1,5 – 9,2); rectocele (ORadj: 11, 9; IC 95 % 1,5 – 98); hemorrhoids (ORadj: 2,0; IC 95%: 1, 5 – 2,8); and stroke (ORadj: 3,9; CI 95%: 1,4-11,6) . Among men, the statistically significant associated factors were: higher age (75 to 100 years old) (ORadj: 7,6; CI 95%: 3,3 – 17,0) nervous system disease (ORadj: 2,7; CI 95%: 1,5-4,6); and stroke (ORadj: 6,0; CI 95%: 1,4-22,9). The variables higher age and stoke were statistically significant in all three tested statistical models. For the general model it was observed C= 0,74; for the female model C = 0,64; and for the male model C = 0,63.

Interpretation of results
In this study, the prevalence of self-reported constipation (25,2%) is consistent with data found in some international literature [1-3]. Besides the associated factors usually showed by literature[1-3], the current study also obtained associations between constipation and other factors like fistula, anal fissure, anorectal surgeries, hemorrhoids and diseases of the nervous system which have not been analyzed in other based-population studies about prevalence of constipation. Is the one of a few epidemiological population-based designed with a specific goal. Other studies about constipation are found in the literature but performed in specific population such as children, elderly and women. According to C-statistics, the results of the three models analyzed in the present study are favorable.

Concluding message
International literature shows similar prevalence rates compared to the study´s results[1-3]. On the other hand, the present study shows some associated variables, which have not been often analyzed in other population-based studies about constipation. The variables higher age and stroke were statistically significant in all three tested statistical models. Other studies are recommended to verify the statistical associations between constipation and clinical variables as obtained in the present study.

References
1. Schmidt FMQ, Santos VLCG. Prevalence of Constipation in the General Adult Population: An Integrative Review. J Wound Ostomy Continence Nurs. 2014; 41(1):70-6.
2. Suares NC, Ford AC. Prevalence of, and risk factors for, chronic idiopathic constipation in the community: systematic review and meta-analysis. Am J Gastroenterol. 2011;106:1582-91
3. Choung R. Factors Associated with Persistant and non-persistant chronic constipation, over 20 years. Clin Gastroenterol Hepatol. 2012;10(5):494–500.

Disclosures