

Worldwide Prevalence and Burden of Functional Gastrointestinal Disorders, Results of Rome Foundation Global Study

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Abstract

Background & Aims

Although functional gastrointestinal disorders (FGIDs), now called disorders of gut–brain interaction, have major economic effects on healthcare systems and adversely affect quality of life, little is known about their global prevalence and distribution. We investigated the prevalence of and factors associated with 22 FGIDs, in 33 countries on 6 continents.

Methods

Data were collected via the internet in 24 countries, personal interviews in 7 countries, and both in 2 countries, using the Rome IV diagnostic questionnaire, Rome III irritable bowel syndrome questions, and 80 items to identify variables associated with FGIDs. Data collection methods differed for internet and household groups, so data analyses were conducted and reported separately.

Results

Among the 73,076 adult respondents (49.5% women), diagnostic criteria were met for at least 1 FGID by 40.7% persons who completed the internet surveys (95% CI, 40.2–41.1) and 20.9% of persons who completed the household surveys. FGIDs were more prevalent among women than men, based on responses to the internet survey (odds ratio, 1.7; 95% CI, 1.6–1.7) and household survey (odds ratio, 1.4; 95% CI, 1.3–1.5). FGIDs were associated with lower quality of life and more frequent doctor visits. Proportions of subjects with irritable bowel syndrome were lower when the Rome IV criteria were used, compared with the Rome III criteria, in the internet survey (4.1% vs 10.1%) and household survey (1.5% vs 3.5%).

Conclusions

In a large-scale multi-national study, we found that more than 40% of persons worldwide have FGIDs, which affect quality of life and healthcare use. Although the absolute prevalence was higher among internet respondents, similar trends and relative distributions were found in people who completed internet vs personal interviews.