

Functional Gastrointestinal Disorders in under 4 years population specimen in Pakistan

SEHRISH MUKHTAR CHEEMA¹, SHAMAMA HASAN², FAROOQ IKRAM²¹*Bahria International Hospital, Islamabad Pakistan*²*Pak Emirates Military Hospital/ National University of Medical Sciences (NUMS) Rawalpindi Pakistan**Correspondence to Dr. Sehrish Mukhtar Cheema*

ABSTRACT

Background: Pakistan is 6th most populous country in the world with an enormous pediatric population. No study has ever been conducted in Pakistan using the Rome IV criteria. The current study aimed to fill the gap.

Methods: A cross-sectional survey of 59 attendants in a tertiary care hospital in Pakistan, using the Rome IV criteria.

Results: Infant colic was the commonest FGID under nine months old while constipation was more common from six months to 18 months

Conclusions: Infantile colic was the most common FGID in this small survey, but larger studies are needed.

Keywords: Gastrointestinal disorders, paediatric

INTRODUCTION

Disease presentations grouped under the umbrella term Functional Gastrointestinal Disorders (FGIDs) include symptoms without having a known or quantifiable organic disease process. The symptoms occur frequently in the young population, comprising seven different disease entities with overlapping symptoms and variable severity. As many as 40% of the young children are estimated to have at least one of the functional disorders categorized under FGID, a number that breaks the bone of an already insufficient speciality services in this category. The vulnerability of the sufferers makes it an urgent and important issue which if overlooked, will lead to fearsome and irreversible consequences.

This is why it is imperative that demographic and epidemiological parameters of the burden of these disorders be measured and reported. Pakistan, being the 6th most populous country, has huge population at risk.

The current study, thus, was conceived to understand and quantify the dynamics of FGIDs in this country.

METHODS

Study protocol was approved by the Institutional Review Board. It was conceived as a cross-sectional. Children under 4 years of age were included. Informed consent was taken. Children with a diagnosis of an organic illness were excluded from the study. An interview was conducted with the informants. The questions on birth events, age, gender, birth order, growth parameters and milestones, number of siblings, breast feeding and weaning practices, FGIDs related symptoms including frequency of stool, spitting, and crying episodes were asked. Information about the place of residence and education level and employment status of parents was recorded. Diagnoses were labeled when the Rome IV criteria for diagnosis of FGIDs was met.

RESULTS

Attendants of less than four years of age who met the inclusion criteria were asked to consent to participation. A total of 59 participants were recruited. The mean age of the participants in the survey was 10 months. The male female ratio was 45%/55%.

Out of the 59 participants who were found to have no organic illnesses, 51 were diagnosed as having FGID comprising of at least one and maximum four symptoms. The most common ones, in order of frequency, were found to have infant colic, constipation, crying episodes, and regurgitation. Colic was reported earlier than any other functional symptom (0-9 months). Constipation usually started from 6 months onwards as children are weaned off their total dependence on breast milk and started solid food. Frequency

of stool increased from six months onwards but settled down in most of the children at around 8-9 months of age.

DISCUSSION

This study used Rome II and Rome III criteria to categorize pediatric FGID. Due to new Rome III criteria for functional abdominal discomfort and abdominal migraine (13.3% Rome III vs 32.1% Rome II). The criteria for persistent discomfort, impairment of everyday functioning, unrelated to physiological processes, and "not faked" were decreased from 3 months to 2 months "were omitted Thus, children who only partially met Rome II's functional abdominal pain criteria met Rome III's. Most patients (59.5%) who met the Rome III criteria for functional abdominal discomfort did not meet the Rome II criteria.

Concerned that the Rome II FAP criteria were too restricted and confounded severity with handicap, the paediatric Rome III FAPS criteria created FAPS as a distinct diagnosis¹¹. So the Rome II criteria didn't categorise young individuals who had stomach aches but kept working. To be classified as FAPS, a kid must have a handicap plus other gastrointestinal symptoms. This sample has more FAP (11.4%) than FAPS (6%). The distinction between FAP and FAPS is important in terms of cause, disease progression, and therapy.

The Rome III criteria for Abdominal Migraine have been revised extensively. The changes in categorisation were largely due to changes in symptom criteria for stomach pain. Most patients who met Rome III criteria did not fulfill Rome II criteria due to lack of headaches, photophobia, or aura (symptom criteria for Rome II but not Rome III). Despite the absence of the Rome III criteria for abdominal migraine, the majority of patients (77.6%) reported a family history of migraine headache.

The most common FGID was IBS. Our group had IBS according to Rome II (44.0%) and Rome III (45.1%). This finding is supported by a recent Rome II classification of our patients. The findings bolster a growing corpus of research indicating IBS symptoms in kids and teens (9,12–14). Almost half of children with non-positive expert assessment for prolonged stomach pain have IBS.

Disparities in symptom chronicity, physiological and psychological correlates, and functional outcomes are obscured by this categorization. The Rome criteria assist us identify IBS patients in the clinic and laboratory.

Compared to Schurman et al, only 15% of children developed functional dyspepsia. Possibly, varied study eligibility conditions. Patients with mild to severe esophagogastroduodenoscopy inflammation were included in the prior trial, but endoscopic inflammation was excluded.

QPGS is both a strength and a weakness in this study. The QPGS lets you compare symptoms between patients and subgroups. The clinical interview lacks flexibility to get further

information and confirm contradictions in symptom reporting between parent and kid. Depending on whether the child or parent reported the symptoms, QPGS categorises paediatric FGIDs differently. According to another study, parents and children had good to medium concordance on the QPGS, but not on teen defecation or menstruation. A clinical interview can reveal and explain these disparities.

Dietary, psychological, and social elements are included in the Rome III criteria "physical exam and development curves to identify FGIDs in children. QPGS cannot detect FGID. The QPGS can assist detect symptoms associated with specific FGID diagnoses when children are seen by a clinician and laboratory tests are done. Evaluating therapeutic efficacy requires homogeneous patient groups.

They were created using Rome II criteria and the Delphi consensus method. Its adolescent Rome Committee There are more paediatric patients with persistent abdominal pain who meet the Rome criteria for pain-related FGIDs. Due to the lack of biological indications, alternative methods of external validation are necessary. Such research can reveal how closely symptoms classified by Rome III criteria coincide. We need to do more clinical research on how well the Rome III criteria group people with similar pathologies, diseases, and treatment responses. Current and future research on the Rome III criteria will assist identify patient subgroups and improve therapeutic specificity for juvenile FGIDs.

CONCLUSION

Infantile colic was the most common FGID in this small survey, but larger studies are needed.

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