CONTROL ID: 2039432 AVERAGE SCORE: 3.75 PRESENTER: Amir Kalani

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**TITLE:** Reduced Healthcare Utilization Achieved by a Multidisciplinary Behavioral Intervention for Adolescents With Irritable Bowel Syndrome (IBS): Four Year Healthcare Utilization Data Including Diagnostic Imaging Studies. Number and Nature of

Healthcare Visits

**AWARDS:** 

**CURRENT CATEGORY:** J. Functional Bowel Disorders

**CURRENT SUB-CATEGORY:** None

**PRESENTATION TYPE:** Poster Only (Will not be considered for oral presentation)

**ACG Research Grant Support:** No

**Purpose:** Chronic abdominal pain is a frequent complaint in adolescents affecting 8-25% of school-aged children. Adolescents with irritable bowel syndrome (IBS) have increased school absenteeism, anxiety, depression, headache, social isolation, and decreased quality of life. Children with IBS have significantly higher outpatient healthcare costs as they have increased office visits for GI-related issues and also extra-gastrointestinal complaints. Our aim was to design a multidisciplinary behavioral program for adolescents with IBS to improve symptoms while reducing healthcare utilization.

**Methods:** Our multidisciplinary behavioral intervention consisted of two 90-minute sessions using techniques such as reassurance, dietary modification, exercise, relaxation techniques, guided imagery, and patient and parental education. Our team consisted of a gastroenterologist, an exercise trainer, a registered dietitian, and a psychologist. The participant group consisted of 97 recently diagnosed children and adolescents with IBS that attended our program. The control group consisted of 86 recently diagnosed children and adolescents with IBS that signed up for the class but did not attend. Cases and controls were well matched for age, gender, and previous healthcare utilization. Medical records were retrospectively reviewed for diagnostic imaging studies and office visits from 3 years prior to diagnosis and up to 4 years after diagnosis.

**Results:** After 4 years, the participitant group had only  $0.42\ 0.14$  while controls had  $1.31\ 1.2$  imaging studies per person (P<0.05). Total imaging studies per person were  $2.2\ 0.85$  vs.  $4.4\ 1.51$  for the participant group and the control group respectively (p<0.05). Four years after diagnosis  $23\%\ (20/86)$  of the control group continued to have GI-related visits compared to only  $10\%\ (9/97)$  of the participitant group. At the 4-year follow-up, GI-related visits were  $1.22\ 0.38$  vs.  $2.85\ 0.82$  visits per year for the participitant group and control group respectively (P<0.05). The 4-year follow-up did not show any significant difference between the 2 groups in terms of overall visits; however, the participitant group had significantly lower mental health visits compared to the control  $7.65\ 8.61$  vs.  $1.8\ 1.25\ (p<0.05)$ .

**Conclusion:** A multidisciplinary behavioral program offered to adolescents with newly diagnosed IBS significantly reduced GI-related imaging, total imaging, GI-related visits, and mental health visits up to 4 years after diagnosis. Similar programs may reduce the future health care load of IBS.

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I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

**Initiated Research:** Investigator

FDA Approval: No

**Designed Study:** Investigator **Performed Analysis:** Investigator **Investigator Contribution:** No **Abstract Author:** Investigator

**Study Results:** Yes **Secondary Analyses:** No

Supported by Industry Grant: No