

A Study on the Prevalence of Irritable Bowel Syndrome (IBS) in Abha, Saudi Arabia

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Abstract

Background: Irritable bowel syndrome (IBS) is a serious problem in Abha as in most communities in the world and is affecting at least 10-20% of subjects.

Methods: A cross sectional study was adopted. Around 150 subjects were selected randomly from colleges and primary health centers. An interview schedule was prepared to collect personal background information, general information and information about the disease.

Results: IBS was more prevalent in women than in men, the prevalence being 53.3%. Thirty four percent of the cases had constipation only sometimes and 36.7% of the subjects felt insomnia often. In 55% of the cases there was stomach distension. Sixty four percent of the subjects declared that they either had colon disease or knew someone with the disease. A majority of the subjects (61.3%) had IBS symptoms, when they were under psychological stress or anger.

Conclusion: The results of the current study concluded that the syndrome of colonic nervous disorder is widespread among the members of society and needed immediate attention.

Keywords: Irritable bowel; Constipation; Colon disease

Introduction

IBS or Irritable bowel syndrome is a functional defect in the colon, leading to symptoms in the digestive system such as flatulence and indigestion and output [1]. Although these symptoms are not serious, it does not lead to a serious illness in the future, but it is very disturbing for the patient [2]. Diarrhea or constipation may predominate, or they may alternate [1]. It is a functional disorder in the activities of the stomach and bowel action [3] and has no known organic cause [1,4].

Irritable bowel syndrome is a functional gastrointestinal disorder characterized by abdominal pain or discomfort and accompanied by a change in bowel habit [5]. The condition has a population prevalence of between 5% and 20% in community surveys [6,7]. No known structural or anatomical explanation accounts for the pathophysiology of irritable bowel syndrome, and the exact cause remains unknown, although several mechanisms have been proposed. Altered gastrointestinal motility may contribute to the change in bowel habit reported by some patients, [8,9] and a combination of smooth muscle spasm, visceral hypersensitivity, and abnormalities of central pain processing may explain the abdominal pain that is an essential part of the symptom complex [10,11].

Irritable bowel syndrome is a chronic relapsing and remitting condition and a significant proportion of patients will consult their general practitioner with symptoms [12-14]. Current guidelines for the management of irritable bowel syndrome in the United Kingdom recommend that the diagnosis should be made on clinical grounds

alone, without the need for invasive investigations, unless alarm symptoms such as rectal bleeding or weight loss are present [15,16]. As a result general practitioners are increasingly responsible for the initial management of patients with irritable bowel syndrome and are expected to refer only a minority to secondary care.

Irritable bowel syndrome (IBS) is a common functional gastrointestinal disorder that may be triggered by enteric pathogens and has also been linked to alterations in the microbiota and the host immune response. The authors performed a detailed analysis of the faecal microbiota in IBS and control subjects and correlated the findings with key clinical and physiological parameters [17].

Irritable bowel syndrome is a disease that can be diagnosed positively on the basis of an established series of criteria and limited exclusion of organic disease. It is the most common disease diagnosed by gastroenterologists and affects about 20% of all people at any one time. Symptoms fluctuate, and the overall prevalence rate is relatively constant in Western communities. Ten per cent of patients present to their physicians. The illness has a large economic impact on health-care utilization and absenteeism. Symptomatic treatment includes fiber for constipation, loperamide for diarrhoea and low-dose antidepressants or infrequent use of antispasmodics for pain; novel pharmacological agents, psychotherapy and hypnotherapy are being evaluated [18].

Methods

Cross sectional study design was used to carry out this study. A large number of community members participated in the study. 150

men and women were randomly selected from colleges and primary health care centers [19-22].

Interview schedule is composed of 3 parts:

Part 1: Personal data such as name, age, education, marital status, sports, smoking.

Part 2: General questions about how to live.

Part 3: Information about the disease.

A pilot study will be conducted on a team of 15 members of the community to test applicability, feasibility and practical application of the tools and the necessary adjustments in the questionnaire will be made in accordance with the results of the pilot study.

The agreement for participation of the informants will be taken after full explanation of the aim of the study. Participants will be given the opportunity to refuse the participation. Also they will be assured that the information would be confidential and used for the research purpose only.

For the analysis of different variables according to appropriate statistical test SPSS 20 platform was used.

The results of the present study are presented under the following heads mentioned below.

Age of the selected subjects

A majority of the subjects selected belonged to the age group of 30 years, followed by 40 years and 20 years respectively. Only a small proportion of the subjects were 50 years (Figure 1).

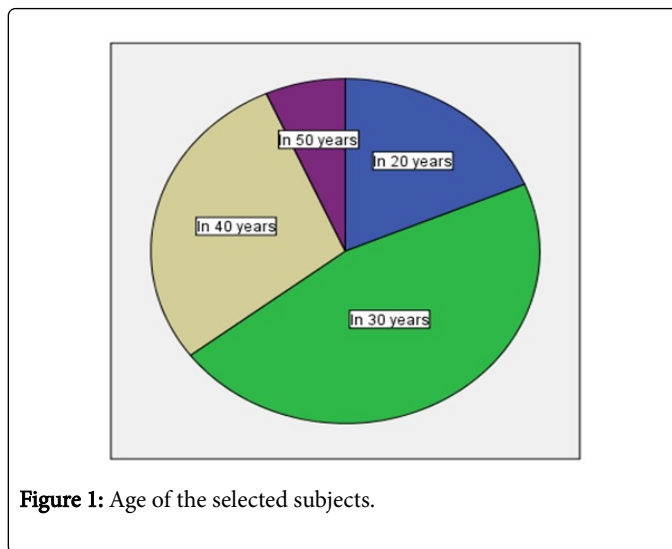


Figure 1: Age of the selected subjects.

Background information of the study subjects

A majority of the subjects which were presented with IBS were females (53.3%). Sixty one percent of the subjects were married. Only 4% of the female subjects were widowed. Eighty five percent of the subjects had secondary and higher education. Only 3.3% of the subjects were uneducated. Also a majority of the subjects did not play sports (32.7%) (Table 1) [23-25].

| Personal information | Frequency | Percentage |
|--|-----------|------------|
| Gender | | |
| Male | 70 | 46.7 |
| Female | 80 | 53.3 |
| Social status | | |
| Unmarried | 41 | 27.3 |
| Married | 92 | 61.3 |
| Divorced | 11 | 7.3 |
| Widowed | 6 | 4.0 |
| Education level | | |
| uneducated | 5 | 3.3 |
| primary education | 4 | 2.7 |
| Intermediate | 14 | 9.3 |
| Education Secondary education and higher | 127 | 84.7 |
| Do you play sports constantly | | |
| Yes | 31 | 20.7 |
| No | 49 | 32.7 |
| Scarcely | 29 | 19.3 |

| | | |
|-----------|-----|------|
| Sometimes | 41 | 27.3 |
| Total | 150 | 100 |

Table 1: Background information.

General information of the study subjects

A majority of the subjects (41.3%) drank more than 10 cups of water per day (29.3%); 40.7% of the subjects ate warm food, 34% had cases of

constipation only sometimes and 36.7% of the subjects felt insomnia often (Table 2).

| | | |
|--|-----|------|
| Drink plenty of water (more than 10 cups) | | |
| Yes | 62 | 41.3 |
| No | 17 | 11.3 |
| Scarcely | 18 | 12.0 |
| Sometimes | 53 | 35.3 |
| Drink a large amount of soft drinks | | |
| Yes | 44 | 29.3 |
| No | 37 | 24.7 |
| Scarcely | 37 | 24.7 |
| Sometimes | 32 | 21.3 |
| Eat a lot of food warm | | |
| Yes | 61 | 40.7 |
| No | 25 | 16.7 |
| Scarcely | 21 | 14.0 |
| Sometimes | 43 | 28.7 |
| Cases of constipation often | | |
| Yes | 26 | 17.3 |
| No | 36 | 24.0 |
| Scarcely | 37 | 24.7 |
| Sometimes | 51 | 34.0 |
| Feel insomnia often | | |
| Yes | 55 | 36.7 |
| No | 19 | 12.7 |
| Scarcely | 31 | 20.7 |
| Sometimes | 45 | 30.0 |
| Total | 100 | 100 |

Table 2: General information.

Presence of stomach distension in the study subjects

In 55% of the selected subjects there was stomach distension, whereas 35% of the subjects had stomach distension only sometimes.

Another 33% of the subjects did not complain of stomach distension (Figure 2).

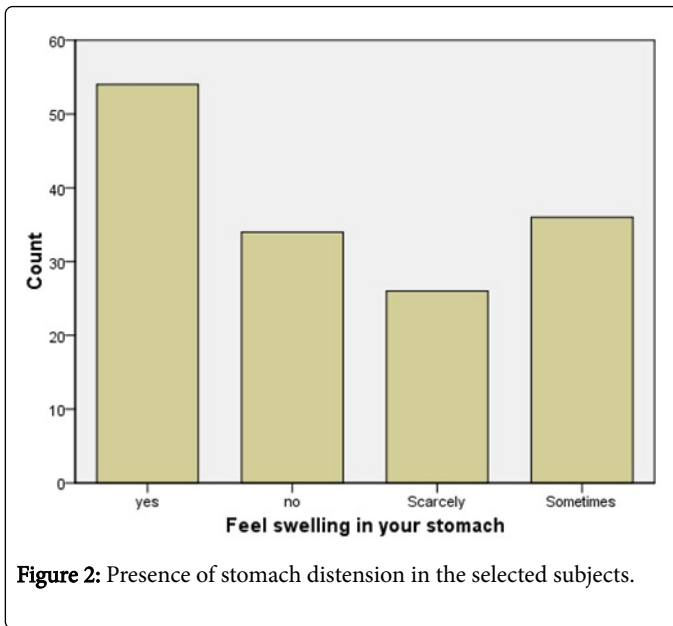


Figure 2: Presence of stomach distension in the selected subjects.

Smoking habits of the study subjects

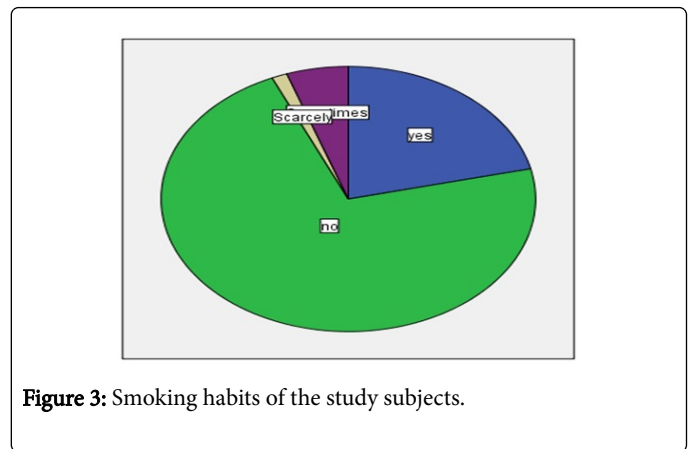


Figure 3: Smoking habits of the study subjects.

Seventy five percent of the subjects did not have the smoking habit. The majority of the remaining subjects smoked regularly. Less than 10% smoked sometimes or scarcely (Figure 3).

Knowledge of the study subjects about the disease

| Do you have a colon disease or know someone with a colon | | |
|--|----|------|
| Yes | 96 | 64.0 |
| No | 26 | 17.3 |
| Scarcely | 8 | 5.3 |
| Sometimes | 20 | 13.3 |
| Are you getting the disease if there is psychological pressure, or in cases of anger | | |
| Yes | 92 | 61.3 |
| No | 31 | 20.7 |
| Scarcely | 12 | 8.0 |
| Sometimes | 15 | 10.0 |
| You have information on the symptoms of colon disease | | |
| Yes | 79 | 52.7 |
| No | 45 | 30.0 |
| Scarcely | 8 | 5.3 |
| Sometimes | 18 | 12.0 |
| Know how to behave if symptoms of colon disease appeared | | |
| Yes | 53 | 35.3 |
| No | 73 | 48.7 |
| Scarcely | 4 | 2.7 |
| Sometimes | 20 | 13.3 |
| You have symptoms of acute and chronic disease of the colon | | |
| Yes | 36 | 24.0 |

| | | |
|---|-----|------|
| No | 73 | 48.7 |
| Scarcely | 12 | 8.0 |
| Sometimes | 29 | 19.3 |
| Are you taking medication for chronic diseases | | |
| Yes | 30 | 20.0 |
| No | 109 | 72.7 |
| Scarcely | 4 | 2.7 |
| Sometimes | 7 | 4.7 |
| Did you make a regular periodic inspection | | |
| Yes | 24 | 16.0 |
| No | 77 | 51.3 |
| Scarcely | 23 | 15.3 |
| Sometimes | 26 | 17.3 |
| Are you committed to the instructions of doctors | | |
| Yes | 46 | 30.7 |
| No | 36 | 24.0 |
| Scarcely | 22 | 14.7 |
| Sometimes | 46 | 30.7 |

Table 3: Knowledge about the disease.

Sixty four percent of the subjects declared that they either had colon disease or knew someone with the disease. A majority of the subjects (61.3%) had IBS symptoms, when they were under psychological stress or anger. Fifty three percent of the subjects reported that they knew about the symptoms of colon disease.

Around 49% of the subjects did not have the knowledge to modify their food or lifestyle habits, when they had a colon disease. Forty nine percent of the subjects reported that they did not have acute or chronic disease of the colon. Seventy three percent of the subjects were taking medications for chronic disease of the colon.

Around 51.3% of the subjects did not have periodic consultation with the physician. Around 30.7% of the subjects did not have any commitment to the instructions of the doctors (Table 3) [26].

Results and Discussion

Irritable bowel syndrome is a widespread health problem among many people, with a prevalence of 10 to 20% in both America and Europe and slightly lower in Asia and Africa.

Studies in the Abha region showed that people aged 30 years and over (46%) and most of them women (53.3%) agreed with the study results indicating that more women than men (51%) aged 40-59 years were suffering from IBS. In other studies, the number of women infected with the disease is higher at (76.7%).

The current study showed that the proportion of people with constipation (34%) was very close to other study results, which showed the proportion of people with constipation to be 33%.

Though 84.7% of the subjects were educated, only 64% were able to report that they suffered from colon disease.

Around 51.3% of the subjects did not have periodic consultation with the physician, whereas 30.7% of the subjects did not pay heed or have any commitment to the instructions of the doctors.

Psychological stress or anger led to symptoms of IBS in a majority of the subjects (61.3%). Though a majority of the subjects (75%) were non-smokers, smoking was still persistent to a small degree in the remaining percentage of the subjects (25%).

It can be inferred from the present study that a good percentage of the subjects had a sound knowledge about the disease and its symptoms. They just have to put their knowledge to practice so that prevention or early treatment of IBS is possible [27].

Conclusion

The results of the current study concluded that the syndrome of colonic nervous disorder is widespread among the members of the society for different reasons, including the way of eating, tension and anxiety. The prevalence of IBS was higher in women than in men. Though consumers are educated, our efforts should be directed towards the community to enhance their knowledge of IBS and how to prevent it or decrease the severity of the symptoms of the disease. The

importance of a physician is that they could help relieve pain and other symptoms such as anorexia with a combination of drugs and diet therapy.

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