

REVIEW- IMPACT OF COVID-19 ON INDIVIDUALS WITH IRRITABLE BOWEL SYNDROME

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Abstract

The goal of this study was to describe the influence of the COVID-19 pandemic on ability to engage in activities and the influence on psychological distress and gastrointestinal symptoms among individuals with irritable bowel syndrome (IBS) and comorbid anxiety and/or depression.

Key words: : irritable bowel syndrome, covid-19, pandemic stress

INTRODUCTION

Irritable bowel syndrome (IBS), referred to previously as spastic or nervous colon, and spastic bowel, is a functional gastrointestinal disorder characterized by a group of symptoms accompanied together that include abdominal pain and changes in the consistency of bowel movements. These symptoms occur over a long time, often years. It has been classified into four main types depending on whether diarrhea is common, constipation is common, both are common (mixed/alternating), or neither occurs very often. (Whitehead,2012)

Coronavirus disease 2019 (COVID-19) pandemic has affected the psychological health of people, causing a higher level of stress. Stress can exaggerate the symptoms of irritable bowel syndrome (IBS). To assess the effect of the COVID-19 pandemic stress on patients with IBS in Saudi Arabia a descriptive cross-sectional approach was used, which targeted accessible subjects with IBS from different regions of Saudi Arabia. Data were collected from participants using a structured electronic questionnaire, which captured the participants' socio-demographic data, medical history, IBS clinical data, self-reported stress due to COVID-19, and its effect on IBS symptoms. (Definition and Facts for Irritable Bowel Syndrome" NIDDKD, 2015)

A total of 1255 IBS patients completed the questionnaire. About 63.4% of them reported stress due to the pandemic. The most frequently

reported causes of stress were fear of infection occurring in the family, followed by fear of self-infection (43.5%), and death due to COVID-19 infection (17.2%). Most of the stressed participants (56.6%) reported that stress usually exaggerated IBS symptoms. Almost 22% of them consulted a physician for stress aggravation of the symptoms. (Mohammed A. Alzahrani, 2020).

MATERIAL AND METHOD

A descriptive cross-sectional approach was used to target accessible populations suffering from IBS in different regions of Saudi Arabia. Adults aged 18 years or above having IBS were the target population. The survey covered participants from the 5 regions of Saudi Arabia (central, eastern, northern, southwestern and western). The sample size was estimated by Epi Info software, version 7.2. With predicted proportion of COVID-19 related stress among IBS patients of 50%, an absolute precision of 3% and at 95% confidence, the minimal sample size required for the study was measured to be 1068 IBS subjects. To account for non-response bias, a total sample of 1255 was targeted. (Mohammed A. Alzahrani, 2020)

In the present study, a total of 1857 responses were collected of which 1255 (67.58%) respondents were eligible and completed the questionnaire: 329 (26.2%) from central region, 143 (10.3%) from eastern region, 220 (17.5%) from northern, 319 (25.4%) from southwestern region and 244 (19.4%) from western region. Participants' age ranged from 18 to 75 years and a mean age of 27.5 ± 9.3 years. The majority of the respondents were females (74%), single (66.1%), having a university level of education (57.8%), students (43.8%), had just adequate monthly income (61.4%), and from urban areas (84.5%). Only 19.8% suffered other chronic health problems besides IBS. The onset of IBS was recent (less than 1- year) in 26.9% of subjects and more than 2 years in 38.5%. The most frequent IBS symptoms reported by participants were flatulence with abdominal distension (50.2%), abdominal pain (47.5%), and changes in bowel habits (diarrhea and constipation) (24.1%).

Table 1- describes the COVID-19 pandemic stress and its effects on IBS symptoms. About 63.4% of the participants stressed due to the pandemic. The most frequently reported causes of stress were fear of a family member contracting the infection (84.1%), followed by fear of self-infection (43.5%), and death due to COVID-19 infection (17.2%). Most of the stressed participants (56.6%) reported that stress usually exaggerates IBS symptoms, and (33.8%) that the stress sometimes exaggerates the symptoms. Almost 22% of the subjects consulted a physician for stress aggravation of the symptoms, 18.1% used sedatives due to stress, and 9.2% modified IBS medications due to the stress. Moreover, 75.5% of the

participants reported impaired daily activities due to symptoms exacerbation.

Table 1

The link between COVID- 19 and its effects on IBS patients

	Stress and stress effects	No.
Stress due to COVID-19 pandemic and related procedures	Yes	796
	No	459
Causes of stress	Afraid of infection in family member	670
	Afraid of being infected	347
	Afraid of loss of income	63
	Afraid of dying duet o the virus	137
Stress exaggerated IBS symptoms	Yes	444
	Sometimes	265
	No	75
Consulted doctor duet to stress	Yes	172
	No	612
Exxagerated symptoms affect daily activities	Yes	592
	No	192

The COVID-19 pandemic is a global health crisis affecting several countries, with millions of cases and thousands of deaths reported to date.(Sohrabi C, Alsafi,2019) Such a widespread pandemic is associated with adverse effects on mental health. Our study targeted IBS patients in Saudi Arabia to assess the subjective stress they experienced due to the COVID-19 pandemic and its effect on IBS symptoms. The study revealed that two-thirds of the participants were stressed due to the COVID-19 pandemic. During a pandemic, the burden of mental health issues is greater than the proportion of people affected by the infection. (Ornell F, 2020, Reardon, 20215)

In the present study, fear of contracting the infection by self or the family were the most commonly reported sources of stress. Also, about 61% of participants knew a case of COVID-19 and 2% of participants contracted the infection. Studies revealed that fear from COVID-19 infection can create stress and deteriorate psychiatric symptoms. (Rodríguez-Rey, 2021) Fear of contracting the corona virus and becoming sick, suffering economic losses, helplessness, separation from relatives, and stigma are the most widely reported sources of negative mental health issues in the literature. (Wang C, 2020)

More than 90% of the stressed participants had usual or sometimes aggravation of IBS symptoms, especially abdominal distension and cramps, and 75% of them stated that the aggravation of symptoms affected their activities of daily life. Other participants (18%) reported taking sedatives to minimize the stress. The impact of stress on IBS patients is an important

issue that should be considered by both clinicians and patients. IBS symptoms could fluctuate with daily stress, and patients having IBS report more stressful events in their lifetime compared to healthy controls. There is significant evidence about the role of usual stressors of life besides the COVID-19 pandemic in patients of IBS. Patients with IBS frequently experience anxiety and depression, which can aggravate the symptoms. This is because the colon is partly controlled by the nervous system, which responds to environmental stress. (Park S-C, 2020, Rajkumar, 2020)

CONCLUSIONS

During the COVID-19 pandemic, which exacerbated their symptoms and impacted their everyday life. Patients unable to differentiate between COVID-19 gastrointestinal symptoms and IBS symptoms, and patients suffering from chronic morbidities are more vulnerable. COVID-19 pandemic stress exacerbated IBS patients' symptoms and impacted their activities of daily life. The impact of pandemic stress on IBS patients is an important issue that should be considered by both clinicians and patients. IBS patients should be enrolled in supportive psychological health education programs to cope with stressors, including the current pandemic. (Mohammed A. Alzahrani,, 2020)

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