

Assessment of Knowledge, Attitude and Practice towards Irritable Bowel Syndrome and Risk Factors in Riyadh City, 2017

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ABSTRACT

Background: Irritable bowel syndrome (IBS) is a worldwide problem which affect the health and the economy of countries; thus it is the focus of many researchers till now.

Objectives: Evaluating the knowledge, attitude and practice (KAP) of the Saudi community in Riyadh City toward the signs and risk factors of IBD in Kingdom of Saudi Arabia (KSA).

Methods: A cross sectional study conducted at 12 different malls in Riyadh city from October to December 2017 among 977 Saudi adult educated subjects from both genders aged from 20-60 years old.

Results: The prevalence of IBS among the Saudi community was 10.8% (106 out of 977 subjects).

The majority of the subjects has proper awareness regarding the IBS and its risk factors (81.1%) while only 18.9% had poor knowledge about the syndrome. Most of the subjects had positive attitude toward using diet, medications and counselling as the proper management of IBS. The level of knowledge showed a significant association with the higher level of education. **Conclusion:** The majority of subjects had proper knowledge about the nature, prognosis and risk factors of the disease. Other studies should be conducted to measure the KAP of other Saudi population toward IBS from different regions of KSA.

Keywords: Knowledge, Attitude, Practice, irritable bowel syndrome (IBS), Risk factors, Riyadh city, KSA.

INTRODUCTION

The irritable bowel syndrome (IBS) is defined as gastrointestinal disorder associated with chronic discomfort and abdominal pain with alteration of the bowel without pathological condition^(1, 2). It is a worldwide problem which affect the health and the economy of countries, thus it was the focus of many researchers but till now its etiology is still a debate. However, this condition was usually combined with noncolonic symptoms^(3, 4). About 12% of the primary health care visits as well as 28% of visiting gastroenterologists were associated with IBS^(4, 5).

This condition could result in many direct and indirect economic burdens because of the need to continuous management which is expensive and should not be underestimated^(4, 6). This condition also utilizes more healthcare resources with more frequent physician and primary health care visits, medications, surgery and laboratory investigations^(7, 8). IBS impairs the quality of life and could affect the physical function, emotional and social life resulting in depression, loss of confidence and retardation in work status^(9, 10). However being simple condition, its symptoms present as serious conditions and may be serious than diabetes and hypertension^(11, 12). The diagnosis is based on the symptoms but some other diseases may share the same signs as colon cancer and diarrhea, thus optimal management is based on proper and correct diagnosis^(8, 13). The present study aimed at assessing the KAP of the Saudi community in

Riyadh City toward the signs and risk factors of IBD.

METHODS

Study design

A cross sectional study conducted at 12 different malls in Riyadh city from October to December 2017.

Study population and sample size

The study population were Saudi adult subjects from both genders aged from 20-60 years old and were able to read and write. The Riyadh city was divided into four parts then 12 random malls were chosen from different parts of the city using multi-randomized sampling technique. The study included 977 Saudi subjects who were interviewed at shopping malls and were asked to fill up the questionnaire.

Study tools

The questionnaire was developed and validated by the supervisors after reviewing the available online studies on the research engines that were conducted in KSA to study the KAP of Saudi subjects toward IBD and its risk factors. The questionnaire was translated into simple Arabic to provide access for all subjects who can't read English. The questionnaire included 4 parts divided as demographics, knowledge, attitude and practice of the subjects.

Ethical approval

The questionnaire was revised and approved by the supervisors and the ethical committee of the Faculty of Medicine. All the included subjects gave an

informed approval. **The study was done after approval of ethical board of King Saud university.**

Statistical analysis

The data analysis was done using the SPSS (22) for windows. The variables are shown as percentages and frequencies. Data were presented as percentages and frequencies. Chi-square test was used to assess the association between knowledge and demographics of included subjects.

RESULTS

Demographics of the studied subjects

The study included 977 Saudi subjects aged from 20-60 years old in which 51.2% of them aged from 20-40 years and 48.8% aged from 41-60 years old. The majority of the subjects (81.3%) had university degree while 18.7% had secondary or primary school degree. More than half of the participants were males (52.3%) and (47.7%) were females (Table 1).

Table (1): Demographic of included Saudi subjects (977)

Age	No.	Percentage (%)
20-40	500	51.2
41-60	477	48.8
Educational Level		
College	794	81.3
Secondary or primary School	183	18.7
Gender		
Male	511	52.3
Female	466	47.7

Prevalence of IBS: Figure.1 shows the prevalence of IBS among the Saudi community as 106 (10.8%) subjects.

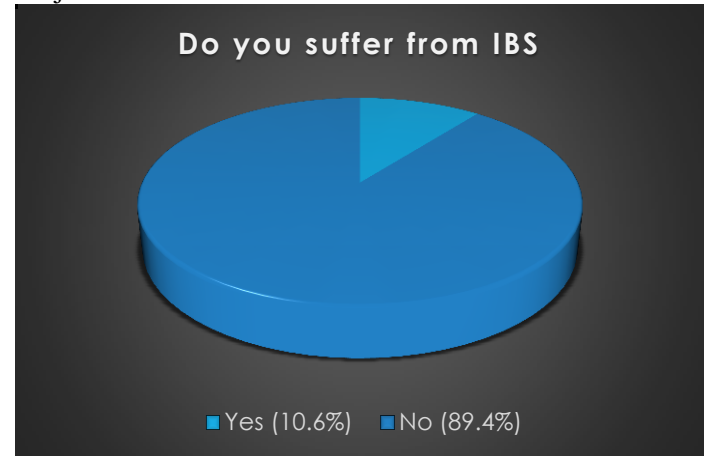


Figure 1: prevalence of IBS among respondents.

Assessment of knowledge of included subjects

The knowledge of the included subjects presented in table (2). Most of the participants answered correctly regarding the seriousness of the condition and its impact on the quality of life (99.3%) but it can't shorten the life of IBS patients (100%). However, 68.2% incorrectly thought that IBS is more common than diabetes and hypertension. About 58.2% of the subjects correctly believe that the prevalence of IBS is more prevalent than colon cancer. All the subjects had good knowledge about the risk factors associated with IBS including diet and food intolerance, genetic, other diseases and distress as well as they had good knowledge about the symptoms of IBS. The majority of subjects had proper knowledge about the diagnosis and proper management of IBS through diet and medications.

Table (2): Knowledge of the participants regarding IBS (977)

	Correct	Incorrect
IBS is a serious condition that could decrease the quality of life (T)	970 (99.3%)	7 (0.7%)
IBS could shorten the life of the subjects (F)	977 (100%)	0 (0%)
IBS is more common than diabetes and hypertension (F)	311 (31.8%)	666 (68.2%)
Colon cancer is more prevalent than IBS (F)	569 (58.2%)	408(41.8%)
Dietary factors, Food allergies and food intolerances are associated high incidence with IBS (T)	881(90.2%)	96(9.8%)
Genetic predisposition, a preceding viral or bacterial illness are major risk factors for IBS (T)	977(100%)	0(0%)
Psychological and emotional attribution are common disorders associated with IBS (T)	806(82.5%)	171 (17.5%)
The common symptoms include diarrhea, constipation, abdominal pain and bloating (T)	977(100 %)	0 (0%)
Dietary changes could improve IBS symptoms(T)	629(64.4 %)	348 (35.6%)
Prescription medications could improve IBS symptoms (T)	954(97.6%)	23 (2.4%)
Alternative medications could improve the IBS status (F)	568(58.1%)	409 (41.9%)
The diagnosis of IBS is based on recognition of the symptoms (T)	977(100 %)	0 (0%)
Differential diagnosis could enhance the early recognition of the syndrome	723(74 %)	254 (26%)

Level of knowledge among respondents

The majority of the subjects had proper awareness regarding the IBS and its risk factors (81.1%) while only 18.9% had poor knowledge about the syndrome (Table. 3).

Table (3): Respondents' knowledge about IBS

Knowledge level	Frequency	Percent (%)
Good	792	81.1
Poor	185	18.9

Evaluating the subject's attitude and beliefs

The attitude of the subjects and beliefs about the proper treatment showed that all the participants believe that diet, medications and counselling are the proper management of IBS. While only 21.6% and 31.3% thought that IBS could be managed through over the counter (OTC) and alternative medications. About 55.4% had positive attitude toward surgeries as the best strategy for management of IBS (Table 4).

Table (4): Attitude and beliefs toward IBS (n=977)

Subjects positive attitude and beliefs regarding effectiveness of treatments for IBS	No.	Percentage (%)
Diet	977	100
Prescription medications	977	100
OTC medications	211	21.6
Alternative medications	306	31.3
Counselling	799	100
Surgery	541	55.4

Association between awareness and demographics of included participants:

Table. 5 showed that the level of knowledge showed a significant association with the higher level of education.

Table. (5): Association between Awareness and demographic of included subjects

	Good Knowledge (n=792)	Poor Knowledge (n=185)	P-value
Age (years)			
20 – 40	400 (50.5%)	100 (54.1%)	0.811
41-60	392 (49.5%)	85 (45.9%)	
Gender			
Male	409 (51.6%)	102 (55.1%)	0.062
Female	383 (48.6%)	83 (44.7%)	
Education Level			
Collage	709 (89.5%)	85 (45.9%)	0.001
Secondary School	83 (10.5%)	100 (54.1%)	

DISCUSSION

IBS could significantly impact the economic status of countries due to the high costs of continuous treatment and usage of health care systems. Also, IBS could decrease the quality of life and result in depression and chronic pain^(5,14).

The present study has some strength points including it is the first study to evaluate the KAP of community subjects toward IBS. The questionnaire also was validated and revised to focus on the important nature, risk factors and management of the syndrome. Thus this study didn't replicate other studies questionnaires or data. The prevalence of IBS was 10.6% of the subjects, which was lower than other studies conducted in KSA among adults and students as its prevalence among medical

students was 31.8%⁽¹⁵⁾ in Jeddah city and 21% in Riyadh city⁽¹⁶⁾.

The level of knowledge attitude and beliefs were adequate among most of the subjects and were associated with being highly educated. However, in a study conducted among Saudi patients with IBD to assess their KAP toward IBS showed that most of the patients had misconceptions about the nature and etiology of the syndrome⁽¹⁷⁾. Other studies also showed the same results as most of the subjects had improper knowledge about the development of IBS and its symptoms as well as the different risk factors⁽¹⁸⁻²⁰⁾.

There are several limitations in the study as the majority of the respondents were highly educated,

which doesn't represent the whole population in Riyadh city. The study was also restricted on

Saudi subjects only, which is a limitation as Riyadh city has different immigrant from different nationalities which represent a significant part of population in KSA. The data collection was restricted to Riyadh city in shopping malls, thus there is a need for national studies conducted all over KSA to assess the accurate prevalence of IBS and KAP of community in KSA. The last limitation was the sample size which was restricted with time and transportation as well as the response rate was not well, thus there is a need for large population and cohort studies.

CONCLUSION

The majority of subjects had proper knowledge about the nature, prognosis and risk factors of the disease. Other studies should be conducted to measure the KAP of other Saudi population toward IBS from different regions of KSA.

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