# Adherence to Guidelines in Management of Irritable Bowel Syndrome in Ministry of Health Family Centers and Internal Medicine Department at Ain Shams University Hospitals

*Thesis*

*Submitted in Partial Fulfillment of MSc Degree in Family Medicine*

*By*

**Sarah Abdel Rahman Abdel Rahman El-Ezaby**
*M.B.B.CH*
*Faculty of Medicine - Ain Shams University*

*Supervised By*

**Prof.Dr.Essam Mohammed Bayoumy Helal**
*Professor of Internal Medicine*
*Faculty of Medicine –Ain Shams University*

**Prof. Dr. Diaa Marzouk Abdel Hamid**
*Head of the Family Medicine Department*
*Professor of Community, Environmental and Occupational Medicine*
*Faculty of Medicine- Ain Shams University*

**Dr. Mohamed Magdy Salama**
*Lecturer of Internal Medicine*
*Faculty of Medicine –Ain Shams University*

*Faculty of Medicine*
*Ain Shams University*
**2017**

# Acknowledgment

*First thanks to* **ALLAH** *to whom I relate any success in achieving any work in my life.*

*I wish to express my deepest thanks, gratitude and appreciation to* ***Prof. Dr. Essam Mohammed Bayoumy Helal,*** *Professor of Internal Medicine Faculty of Medicine –Ain Shams University for his meticulous supervision, kind guidance, valuable instructions and generous help.*

*Special thanks are due to* ***Prof. Dr. Diaa Marzouk Abdel Hamid,*** *Head of the Family Medicine Department Professor of Community, Environmental and Occupational Medicine Faculty of Medicine- Ain Shams University for his sincere efforts, fruitful encouragement.*

*I am deeply thankful to* ***Dr. Mohamed Magdy Salama,*** *Lecturer of Internal Medicine Faculty of Medicine –Ain Shams University for his great help, outstanding support, active participation and guidance.*

Sarah Abdel Rahman El-Ezaby


سورة البقرة الآية: ٣٢

# List of Contents

Title Page No.

# List of Abbreviations

| Abb. | Full term |
|---|---|
| *ACG* | *American College of Gastroenterology* |
| *AGA* | *American Gastroenterological Association* |
| *CBT* | *Cognitive behavioral therapy* |
| *FODMAPS* | *Fermentable oligosaccharides, disaccharides, monosaccharides, and polyols* |
| *GPs* | *General practitioners* |
| *HAPC* | *High amplitude contractions* |
| *HQRL* | *Health related quality of life* |
| *HT receptors* | *Hydroxy tryptamine.* |
| *IBS- Mixed* | *Irritable bowel mixed* |
| *IBS* | *Irritable bowel syndrome* |
| *IBS-C* | *Irritable bowel with constipation* |
| *IBS-D* | *Irritable bowel with Diarrhea* |
| *M.B.B.CH* | *Bachelor of Medicine Bachelor of surgery* |
| *MOHP* | *Minisrty of health and populations* |
| *Msc* | *Maters of science* |
| *NICE* | *National Institute of health and care excellence* |
| *NMIC* | *National Medicine Information Center* |
| *RCTs* | *Randomized control trials* |
| *SSRIs* | *Selective serotonin reuptake inhibitors* |
| *TCAs* | *Tri cyclic anti depressants* |

# List of Tables

Table No. | Title | Page No.

# List of Tables cont…

# List of Figures

| Fig. No. | Title | Page No. |
|---|---|---|

## Abstract

**Background**: Irritable bowel syndrome (IBS) is a functional gastrointestinal disorder, characterized by chronic abdominal pain or discomfort and altered bowel habits in the absence of detectable organic pathology. The condition is an important health problem throughout the world. The majority of patients with Irritable bowel syndrome are managed in primary health care facilities. Therefore it's very important for general practitioners and family doctors to be well trained in the approach to functional gastrointestinal disorders. Most of doctors believe that IBS is a diagnosis of exclusion and is not based on criteria, this approach is time consuming and costly of health care system, so using the diagnostic criteria are important to help the physicians to diagnose IBS simply without the need to exclude the other diseases

**Objectives** were to measure the degree of adherence to guidelines in management Irritable bowel syndrome in Ain Shams University Hospitals and in three of Ministry of health family centers(Saray AlQuba, Al Darrassa, and the first settlement centers ) Cairo, Egypt

**Methods:** A cross-sectional study was carried
out on 30 physicians in three Family Medicine centers and 30 physicians from Internal medicine department , Ain Shams University Hospitals every physician was evaluated by two of his patients

**Results:** Almost half of physicians in both groups stated that they relied on diagnostic criteria in diagnosis of IBS , but by evaluating the practice through their patients it was found that only (10%) from family centers and (23.3%) from university were completely adherent to Rome III diagnostic criteria.

**Conclusion**: Low adherence to diagnostic criteria (RomeIII) among study participants from MOHP and it was higher among physicians from university


**Key words:** Irritable Bowel Syndrome (IBS) , Rome III, Functional abdominal pain

# INTRODUCTION

Irritable Bowel Syndrome (IBS) is a chronic functional disorder of gastrointestinal tract. It is characterized by abdominal pain or discomfort with abnormal bowel habit with the absence of biochemical or structural abnormalities ***(NMIC, 2015).***

There have beSen many symptoms-based criteria to diagnose IBS, the hallmark symptom for diagnosis IBS is chronic or recurrent abdominal pain or discomfort associated with altered bowel habit whether diarrhea (IBS-D), constipation (IBS-C) or mixed type (IBS-M) ***(Sarah et al., 2010).***

The first criteria induced were Manning diagnostic criteria in 1978. It identified abdominal pain relieved by defecation, looser stools and more frequent stools at onset of pain, passage of mucus, incomplete emptying of rectum and abdominal distension as key features of IBS. But the criteria didn't mention duration for the symptoms ***(Sarah et al., 2010).***

In 1990, the Rome criteria were developed and they reduced unnecessary testing by removing the requirement of negative blood tests and physical examination findings, the most recent version of Rome criteria was Rome III criteria for IBS and its subtypes which was introduced in 2006 ***(Sarah et al., 2010).***

Rome III Diagnostic criteria stated that the diagnosis is based on: recurrent abdominal pain or discomfort at least 3 days per month in the last 3 months associated with 2 or more of the followings:

1- Improvement with defecation.

2- Onset associated with changes in frequency of the stool.

3- Onset associated with change in the form of the stool.

Each criterion fulfilled for the last 3 months with symptom onset at least 6 months prior to diagnosis ***(Longstreth et al., 2009).***

Certain red flags or "alarm signs" call for special consideration of other disorders before symptoms can be attributed to IBS. These signs include: Age of 50 or older, blood in the stools, night time symptoms that awake the individual, unintentional weight loss, change in the symptom quality (e.g., new and different pain) ***(Longstreth et al., 2009)***.

Vanner et al. demonstrated that Rome-criteria symptoms have a positive predictive value of 98% for diagnosing IBS. In other words, 98% of patients with Rome-criteria symptoms have IBS, rather than an underlying organic condition, after undergoing standard evaluations ***(Spiegel et al., 2007).***

After diagnosis of IBS, patients should be given information that explain the importance of self-help and effectively managing their IBS. This should include

information about lifestyle, physical activity, diet and symptoms-targeted medication ***(NICE, 2008).*** .

According to NICE guidelines (which were published in 2008 and updated in 2015) to diagnose and manage Irritable Bowel Syndrome: Diet and nutrition should be assessed and the following advice given: Have regular meals and take time to eat, avoid missing meals or leaving long gaps between meals, drink at least 8 cups of fluid per day especially water or other non-caffeinated drinks, restrict tea and coffee to 3 cups per day, reduce intake of alcohol ***(NICE, 2008).***

**Pharmacological treatment:** antispasmodic should be considered, laxatives should be considered for constipation. Loperamide should be the first choice for anti motility drugs in diarrhea. Tricyclic antidepressants are considered the second line of treatment with low dose (5-10mg) once at night ***(NICE, 2015).***

As regards prevalence of IBS, a cross sectional descriptive study with multistage cluster probability sample has been carried out using Rome III criteria questionnaire of IBS; which is a self-administrated questionnaire that consists of ten questions assessing the current status of an apparently normal person. It was done to estimate the prevalence of IBS among medical and non-medical students in Suez Canal University, Egypt, illustrated that about 22,9% of students have IBS ***(Darweesh et al., 2015).***

In Middle East a study of prevalence of IBS among medical students and interns In Jeddah, KSA illustrated that the prevalence is 31,8% in this group with high rate among females ***(Ibrahim et al., 2013).***

A cross-sectional study was conducted at five major universities in Greater Beirut and its suburbs, between February and June 2014. Using a convenient sample, a total of 813 students aged 18 years old and above participated in this study. Participants were asked to complete a comprehensive anonymous questionnaire which detailed characteristics on socio-demographic, health-related, and lifestyle factors, as well as IBS. The ROME III criteria were used as a tool to ascertain IBS. The study illustrated that about 20.05% were diagnosed as IBS ***(Costanian et al., 2015).***

A population-based, cross-sectional study was carried out in Palestine using Rome III questionnaire to determine the prevalence of IBS, the results was about 30% of all participants have IBS ***(Qumseya et al., 2014).***

Irritable bowel syndrome (IBS) affects up to 10–20% of adults in Western and Asian countries ***(Yuka et al., 2015).***

As regards degree of adherence to diagnostic criteria, a cross-sectional study was carried out among physicians practicing in PHC centers in AlJouf Province,Saudi Arabia, during April 2009 where a 65 questionnaires were fulfilled

about knowledge and practice of IBS and it found that about 35.5% of physicians with masters degree use diagnostic criteria whether Rome or Manning criteria and 14.3% of residents use diagnostic criteria ***(Al-Hazmi, 2012)***.

A systematic search of Pubmed and Embase, where 29 studies were included, found that small percentage of primary care physicians were aware of IBS diagnostic criteria that range from (2-36%; nine studies) while only (0-21%; six studies) used criteria in practice ***(Hungin et al., 2014).***

Making a diagnosis of IBS is important because of the following reasons. Firstly, millions of patients without a definitive diagnosis have symptoms that are amenable to treatment, if the appropriate diagnosis is made. Secondly, untreated symptoms reduce productivity due to both presenteeism and absenteeism; proper treatment can improve the economic burden of this highly prevalent disorder. Thirdly, patients with symptoms of IBS have inappropriate fears and concerns about their symptoms and this may lead to unnecessary testing. Fourthly, lack of a diagnosis may lead to unnecessary procedures and surgeries; in fact, patients with IBS are much more likely to undergo cholecystectomy, appendectomy, and hysterectomy than matched controls ***(Mearin and Lacy, 2012).***

Since Irritable Bowel Syndrome is prevalent in Egypt; missing its diagnosis has economic burden and affects the

quality of life and the treatment based mainly in life style modification. Since physicians diagnose it by exclusion it's found to be important to assess to what extent the physicians in Both Family Health Centers in Cairo, Egypt and Ain Shams University Hospitals follow the guidelines in management of Irritable bowel syndrome.