

# A Study to Assess the Effectiveness of an Interventional Programme on Knowledge Regarding Irritable Bowel Syndrome (IBS) and Incidence of IBS in a Selected Community, Ernakulam

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**Abstract:-** the study was aimed to assess the effectiveness of an interventional program on knowledge regarding irritable bowel syndrome (IBS) and incidence of IBS in a selected community. It was conducted with the following objectives; 1) To assess the knowledge regarding IBS.2) To find out the effectiveness of an interventional program on knowledge regarding IBS among a selected community.3) To find out association between the knowledge of IBS and selected demographic variables.4)To assess incidence of IBS among a selected community. A quantitative research approach with one group pretest –posttest design was adopted for the study.

A sample of 50 were selected using purposive sampling from a selected hospital at Ernakulam district and the data was collected with the help of a tool consisting of a socio demographic profile and a structured knowledge questionnaire regarding IBS and a checklist based on ROME III Criteria to assess the incidence of IBS.As an interventional educational program individual health education with the help of a leaflet regarding IBS was provided and posttest was done using same questionnaire.

The results showed that 86% sample had good knowledge regarding IBS and there is a significant association between pretest knowledge score and demographic variable such as age, education and occupation. And also the interventional program was found to be effective among the selected community (pretest mean knowledge score=9.4% and posttest knowledge score=17.3).Improvement of knowledge regarding IBS was statistically significant (P=0.005) at 0.005 level of significance.

**Keywords:-** IBS: Irritable Bowel Syndrome, interventional programme, incidence.

## I. INTRODUCTION

Irritable Bowel Syndrome [IBS] is a symptom complex characterized by intermittent and recurrent abdominal pain, associated with an alteration in bowel function<sup>1</sup>. The overall incidence of IBS in India varies from 10% to 25%. In most population women report more IBS symptoms than men,

irrespective of diagnostic criteria employed. The rates in women are approximately 1.5 to 3 fold higher than those seen in men. Internationally the overall prevalence of IBS in women is 67% higher than men<sup>2,3</sup>.

Stress, psychological factors and specific food intolerances have been identified as major factors that precipitate IBS symptoms. Unemployment is a risk factor for IBS, possibly related to lower income and more psychological distress as compared to employed individuals. There is also a relationship between smoking habits and alcohol consumption with IBS. As the unemployment and alcoholism are more common in nowadays, many people are at risk for IBS<sup>1</sup>.

### A. Need for the Study

Irritable Bowel Syndrome [IBS] is a wide spread condition involving recurrent abdominal pain and diarrhea or constipation, often associated with stress, depression, anxiety or previous intestinal infection<sup>4</sup>. IBS have an impact on an individual's functioning and quality of life. The health status of both young and elderly individuals with IBS is generally found to be poorer than that of the general population. People with IBS miss three times as many days from work as do those without bowel symptoms<sup>1</sup>. Experiencing the signs and symptoms of IBS can lead to depression and anxiety<sup>5</sup>.

Increasing the knowledge regarding IBS among general public will help in the early recognition and management of IBS. Irritable bowel syndrome is caused by life style changes, alternations in sleep and increased stress .About 10-15% of population are affected in India. Most commonly affected are females. Most cases are seen in younger adults (20-30 years) and older adults (above 50 years). But many people do not seek medical attention for symptoms indicative of IBS<sup>5</sup>. So Researchers felt a need to assess the effectiveness of an Interventional Program on knowledge regarding IBS as well as the incidence of IBS among a selected community.

### B. Statement of the Problem

A study to assess the effectiveness of an interventional program on knowledge regarding irritable bowel syndrome (IBS) and incidence of IBS in a selected community at Ernakulam.

### C. Objectives of the study

- To assess the knowledge regarding irritable bowel syndrome among a selected community
- To find out the effectiveness of an interventional program on knowledge regarding IBS among a selected community
- To find out association between the knowledge of IBS and selected demographic variables
- To assess the incidence of IBS among a selected community.

### D. Operational Definition

- Effectiveness: Refers to the improvement in the knowledge as a result of an interventional program which is measured in terms of pretest and posttest knowledge scores.
- Interventional program – It refers to a health education program given individually with the help of an organized leaflet prepared by researchers after a thorough review of literature regarding all the aspects of IBS.
- Knowledge –It refers to the correct response of the participants to the questionnaire related to IBS which is administered before and after an interventional program.
- Irritable Bowel Syndrome [IBS]–IBS is defined as the functional disorder of motility in the intestine characterized by intermittent and recurrent abdominal pain and stool pattern irregularities.
- Incidence–It refers to number of people having the clinical features suggestive of IBS which is assessed with the help of a checklist based on ROME III criteria.
- Selected community: It includes both females and males who are above the age group of 15 years attending the inpatient and outpatient department of St. Joseph's Hospital Dharmagiri, Kothamangalam, Ernakulam District.

### E. Hypotheses

- H0: There is no difference between pretest knowledge score and posttest knowledge score.
- H1: There is a significant increase in post test score than pretest score after interventional program.

### F. Delimitations

- Knowledge is assessed through a questionnaire.
- This study is conducted among the age group above 15 years, who are attending the IP and OP department of St. Joseph's Hospital Dharmagiri Kothamangalam.
- This study is conducted in a selected community at Kothamangalam, Ernakulam district.

## II. METHODOLOGY

### A. Research Design

The research design used in the study is one group pretest posttest design to assess the effectiveness of an interventional program in a selected community regarding the knowledge of IBS.

- The design can be abbreviated as follows:
- O1 X O2
- O1: Pretest on knowledge regarding IBS

- O2: Posttest on knowledge regarding IBS
- X: Interventional program regarding IBS

### B. Variables

The variables included in the study are independent, dependent and demographic variables. Interventional program on IBS is the independent variable and the knowledge regarding IBS is the dependent variable. Demographic variables are age, sex, educational status, occupation, and religion, number of earning members in the family, type of family, chronic illness, monthly income, alcoholism and smoking.

### C. Setting of the Study

The study was conducted in the outpatient and inpatient departments of St. Joseph's hospital, kothamangalam, Ernakulam district, Kerala state, India.

### D. Population

The population in this study is people above 15 years, who are attending inpatient and outpatient department of St. Joseph's hospital, Kothamangalam.

### E. Sample and Sampling Techniques

In this study the sample include males and females above 15 years who are attending outpatient and inpatient department of St. Joseph's hospital, Kothamangalam who fulfil the inclusion criteria. Sample size was 50. Sampling technique adopted was purposive sampling.

### F. Sampling Criteria

#### a) Inclusion Criteria:

- People who are attending inpatient and outpatient department of St. Joseph's hospital, Kothamangalam
- People both male and female above 15 years of age
- People who are willing to participate in the study
- People who can read and understand Malayalam language.

#### b) Exclusion Criteria:

- People who are critically ill.
- People who are unconscious and not able to respond.

### G. Description of the tool

The tool is finalized after extensive review of literature and opinion of subject's experts. The tool consists of three parts:

Part 1: Demographic profile

Part 2: Knowledge questionnaire

Part 3: Checklist based on ROME III Criteria

- Part 1: Demographic profile

A structured questionnaire for collecting the demographic data which include age, sex, religion, monthly income, occupation, educational status, number of earning members in the family, residential area, chronic illness, alcoholism and smoking.

• Part 2: Knowledge questionnaire

A structured knowledge questionnaire with 20 items based on IBS. Each correct answer carries one mark. The maximum score is 20 and the minimum score is 1.

Scoring interpretation  
 0-5: very poor knowledge  
 6-10: poor knowledge  
 11-15: average knowledge  
 16-20: good knowledge

• Part 3: Checklist based on ROME III Criteria

Table 1 shows interpretation of checklist based on ROME III criteria to assess the incidence of IBS

Score	Interpretation
0-1	Absence of IBS
2-3	Presence of IBS

Table 1: Checklist Interpretation

**III. RESULTS**

The data collected were statistically analyzed and tabulated by applying descriptive statistics such as mean and standard deviation and inferential statistics such as ‘Chi’ Square and paired‘t’ test. The ‘Chi’ Square test was used to find out the association between the demographic variable and knowledge regarding IBS. The paired‘t’ test was used to find out the difference in the scores of knowledge between pretest and posttest. The findings reveal that, among 50 samples about 40% had average knowledge regarding IBS, 32% had poor knowledge, 16% had good knowledge and 12% had very poor knowledge regarding IBS. There is an increase in the knowledge regarding IBS after the interventional program. The table 2 shows that interventional program was found to be effective among the selected community (pretest mean knowledge score=9.4% and posttest knowledge score=17.3).Improvement of knowledge regarding IBS was statistically significant (P=0.005) at 0.005 level of significance.

(n=50)

Pretest mean	Posttest mean	Calculated ‘t’value	Tabled ‘t’value	Inference
9.4	17.3	11.33	1.67	significant

Table 2: Effectiveness Of Interventional Program

Table 3 shows that among the 50 samples taken, 16% have incidence of IBS.

According to ROME III criteria,

0-1: Absence of disease  
 2-3: Presence of disease

(n=50)

Score	Frequency	Percentage%
0-1	42	84
2-3	8	16

Table 3: Incidence Of Ibs

The study also showed that, there is a significant association between the pretest knowledge score and selected

demographic variables such as age, education and occupation. Rests of the variables were not found to be significant.

**IV. CONCLUSION**

On the basis of findings, following conclusions were drawn from the study:

- About 86% of samples have good knowledge regarding IBS.
- There is significant association between knowledge regarding IBS and selected demographic variables such as age, education and occupation.
- Among 50 samples taken about 16% have incidence of IBS.

A. *Limitations*

- The sampling method used in the study was purposive sampling
- The study is limited to a single community
- The study was conducted only in 50 samples

B. *Recommendations*

- A similar study can be undertaken on a large sample to generalize these findings.
- A similar study can be undertaken with a control group and randomization.

C. *Nursing implication*

a) *Nursing practice*

Nurses have important role in health promotion and maintenance. Nurses should have knowledge related to IBS and it causes symptoms and prevention. Based on the information nurses can screen patients with GI symptoms for IBS and can provide health education regarding IBS and improve the health status of the individual as well as the society.

b) *Nursing administration*

As the IBS can significantly reduce the quality of life of an individual. It is essential for nursing administration to assess the knowledge regarding IBS in general population. The nurse administrator should plan in service education to staff regarding IBS. The findings of the present study can motivate the administrative authority to conduct further study regarding this topic.

c) *Nursing education*

Even though IBS is there in the nursing curriculum, the student nurse should give more emphasis on causes, clinical manifestations, diagnosis, management and prevention of IBS. She should educate the people to improve dietary habits and life style and can reduce the incidence of IBS.

d) *Nursing research*

The findings of the present study can be utilized by the nurse researchers to conduct in depth study in this area in large population. Also other studies can be conducted to identify the factors contributing to IBS, and also an experimental study can be conducted so that, the findings can be generalized.

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