Journal Homepage: -www.journalijar.com
INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)
Article DOI:10.21474/IJAR01/2387
DOI URL: http://dx.doi.org/10.21474/IJAR01/2387
ISSN NO. 2320-5407

RESEARCH ARTICLE

PREVALENCE OF IRRITABLE BOWEL SYNDROME AMONG ADULTS INALMADINAH 2016.

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Manuscript Info

Manuscript History

Received: 19 October 2016
Final Accepted: 20 November 2016
Published: December 2016

Abstract

Irritable bowel syndrome (IBS) is a common health problem affecting a substantial proportion of the population. Many individuals with symptoms of IBS do not seek medical attention or have stopped treatment because of disillusionment with current treatment options. Information about prevalence of IBS in Almadinah still deficient. Therefore, the aims of the present study were to estimate the prevalence of IBS in the general population of Almadinah .

a Postal survey was sent to patients selected randomly from the general population of almadinah using a validated questionnaire based on the Rome II criteria .The response rate of the postal survey was 98.12% .

Among 916 subjects, the prevalence of IBS was 25.98% . ratio between male and female 2/1 .Prevalence in 32.36% and in female 16.39%

Prevalence of Irritable bowel syndrome was higher in men and those who are in continues stress and those people with stress have more frequent attacks .

Introduction:-

The epidemiology of any condition is an expansive topic, covering many subjects that individually could warrant their own review articles. Irritable bowel syndrome (IBS) is no different. The intention of this review is to provide a brief overview of the fundamental issues of epidemiological interest relating to IBS. We will discuss the diagnostic process and variation in how IBS is defined, how many of the population have IBS based upon these definitions, which members of the population are most likely to be affected, and discuss key aspects of the natural history, including symptom fluctuation and the association with other functional conditions.

What's IBS:-

Irritable bowel syndrome (IBS) is a functional GI disorder characterized by abdominal pain and altered bowel habits in the absence of a specific and unique organic pathology, although microscopic inflammation has been documented in some patients {1} Population-based studies estimate the prevalence of irritable bowel syndrome at 10-20% and the incidence of irritable bowel syndrome at 1-2% per year.

Prevalence estimates for IBS vary greatly internationally, both within and between countries.
Most studies addressing prevalence of IBS are community surveys, with the majority from Europe, Southeast Asia, and North America. Often, postal questionnaires or telephone interviews invite individuals to self-report symptoms,

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and these responses are then assessed by investigators according to one set of diagnostic criteria. This method reflects the underlying burden of symptoms consistent with a diagnosis of IBS. {2} {3} {4} {5} {6} {7} {8}

Who get IBS :-
In most populations, women report more IBS symptoms than men, irrespective of the diagnostic criteria employed demonstrated that women have an approximately 1.5- to 3-fold higher rate of disease than men. {9}{10}{11}

IBS occurs in all age groups, including children{12} and the elderly, with no difference seen in the frequency of subtypes by age.{13} However, 50% of patients with IBS report having first had symptoms before the age of 35 years,{14} and the prevalence is 25% lower in those aged over 50 years than in those who are younger{15}

One study suggested that IBS was associated with lower socioeconomic status{16}, a finding supported by the theory that lower income is associated with poorer health care outcomes, lower overall quality of life, and increased life stressors.{17} However, others suggest that the opposite is true and that being in a higher socioeconomic group during childhood is associated with higher prevalence of IBS.{18}{19}

The relative risk of IBS is twice as high in individuals with a biological relative with IBS.{20} In twin studies, having a mother or father with IBS is an independent risk factor for an individual having IBS and a stronger predictor than having a twin with IBS{21}. Concordance in monozygotic twins (the proportion of twin pairs who both have IBS) is less than 20%,{21}{22} and the association seen in familial clustering is significantly reduced when somatization is taken into account.{23} These findings suggest the perceived heredity may be more closely linked to learned behavior than to genetic factors.{24}

Objectives:-
Research aim to determine the prevalence of IBS and the risk factors that increase the frequency of attacks in Almadinah 2016

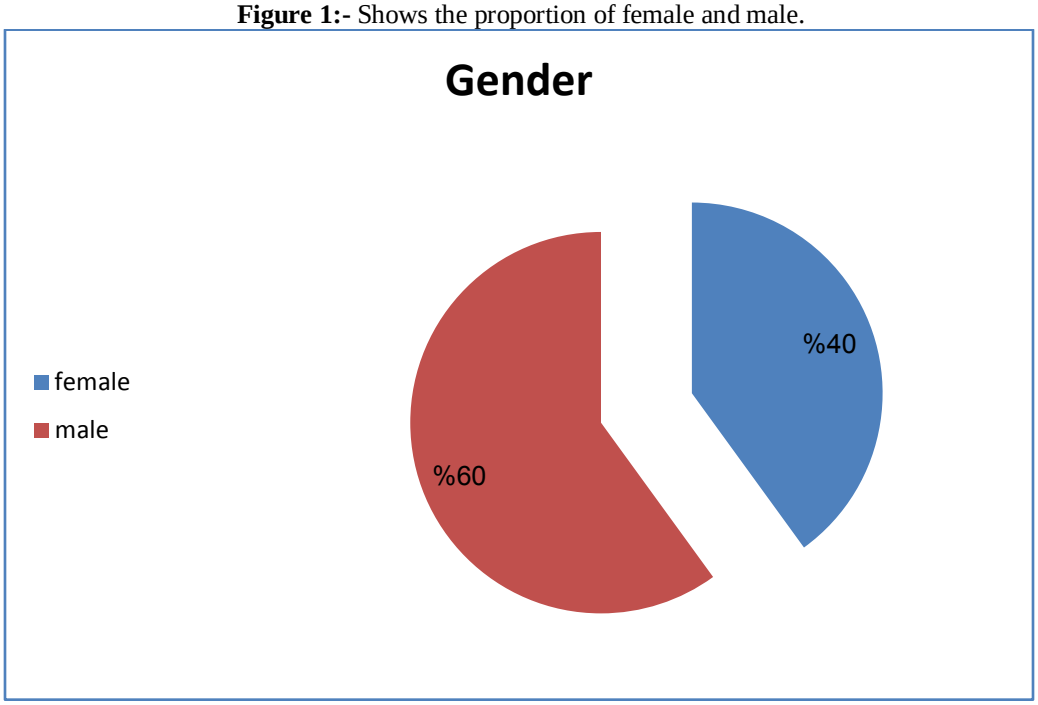
Method and participant:-
Sample of 916 participants was collected in Almadinah City , Saudi Arabia. The study included 916 participants (60.04% male and 39.95% female) a Postal survey was sent to patients selected randomly from the general population of almadinah using a validated questionnaire based on the Rome II criteria .The response rate of the postal survey was 98.12% .

Inclusion and exclusion criteria:-
Inclusions;-
1. ALMADINAH POPULATION
2. FROM ALMADINAH
3. AGE 15-50
4. MALE AND FEMALE

Exclusions:-
a. refuse consent
b. VISITOR OR WORKER from other cities

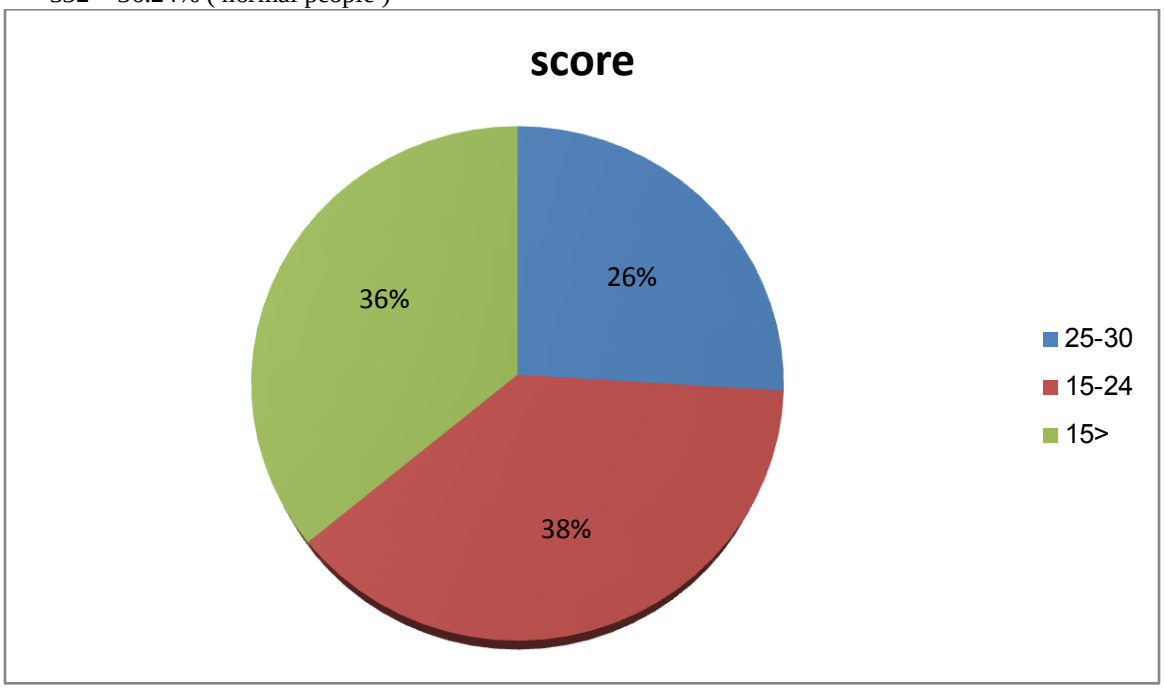
Results:-
Among 916 subjects, the prevalence of IBS was 25.98% . ratio between male and female 2/1 .Prevalence in 32.36% and in female 16.39%. patients who have lactose intolerance 6%. And those who have positive family history 54% . psychological stress among them was 60% .

Figure 1:- Shows the proportion of female and male.

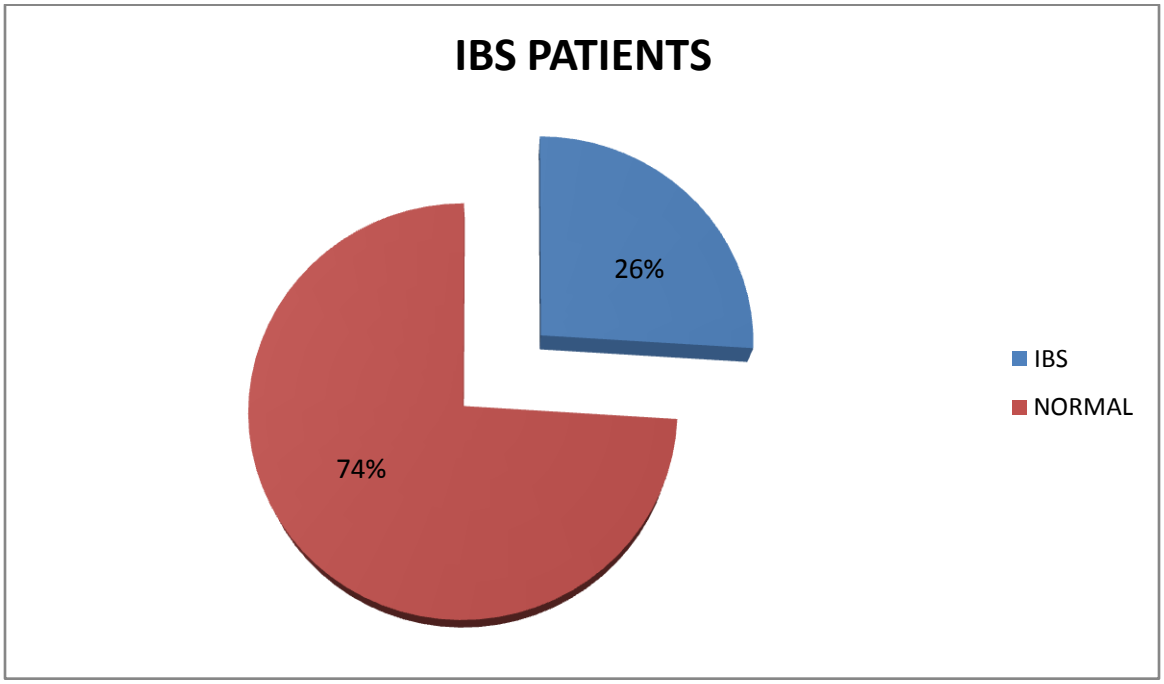


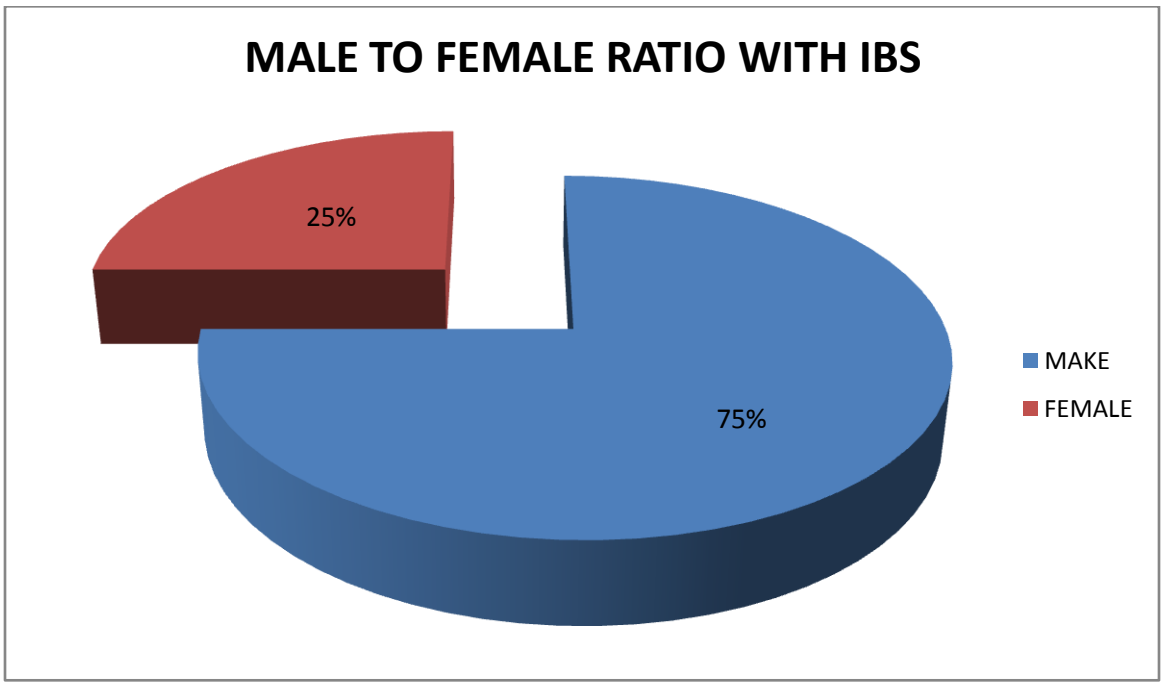
A total of 916 person participated in the survey .
The majority of the respondents are male (60%) compared to males (40%)

Score
30-25 = 238 = 25.98% (IBS patient)
24-15 = 346 = 37.7% (may Have IBS)
<15 = 332 = 36.24% (normal people)

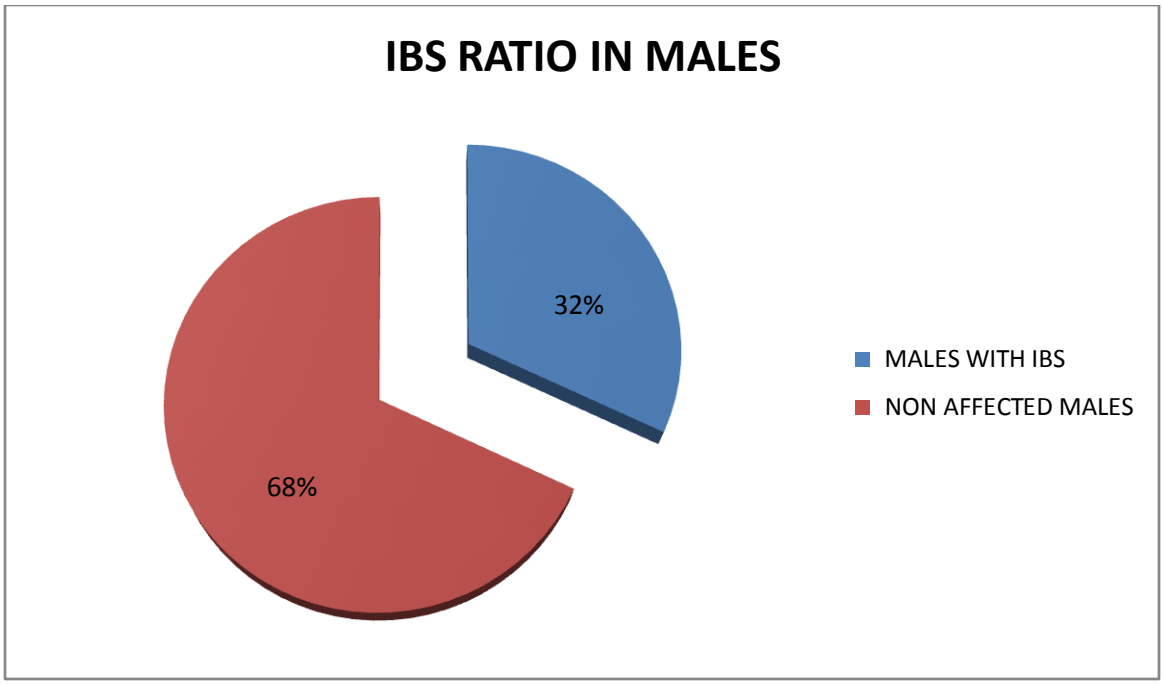


Ibs patients
238 = 25.98%
Male = 178 = 74.78%
Female = 60 = 25.21%





TOTAL MALE = 550
MALES WITH IBS = 178 = 32.36%
NON AFFECTED MALES = 372 = 67.6%



TOTAL FEMALES = 366
FEMALES WITH IBS = 60 = 16.39%
NON AFFECTED FEMALES = 306 = 83.60%

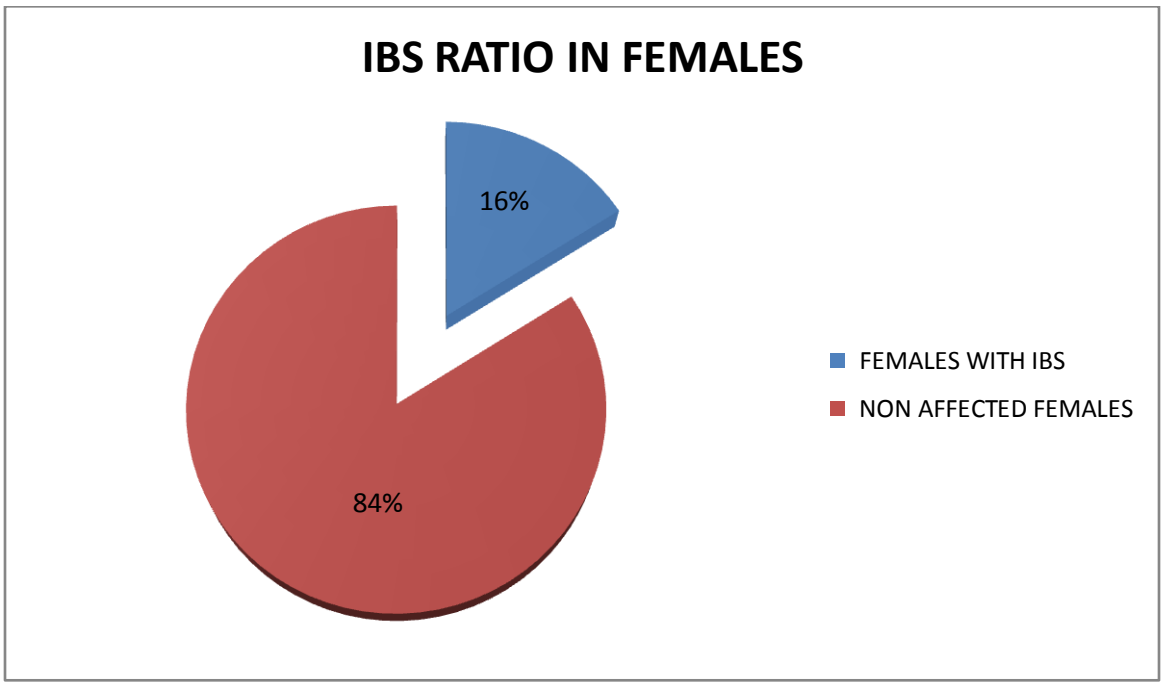
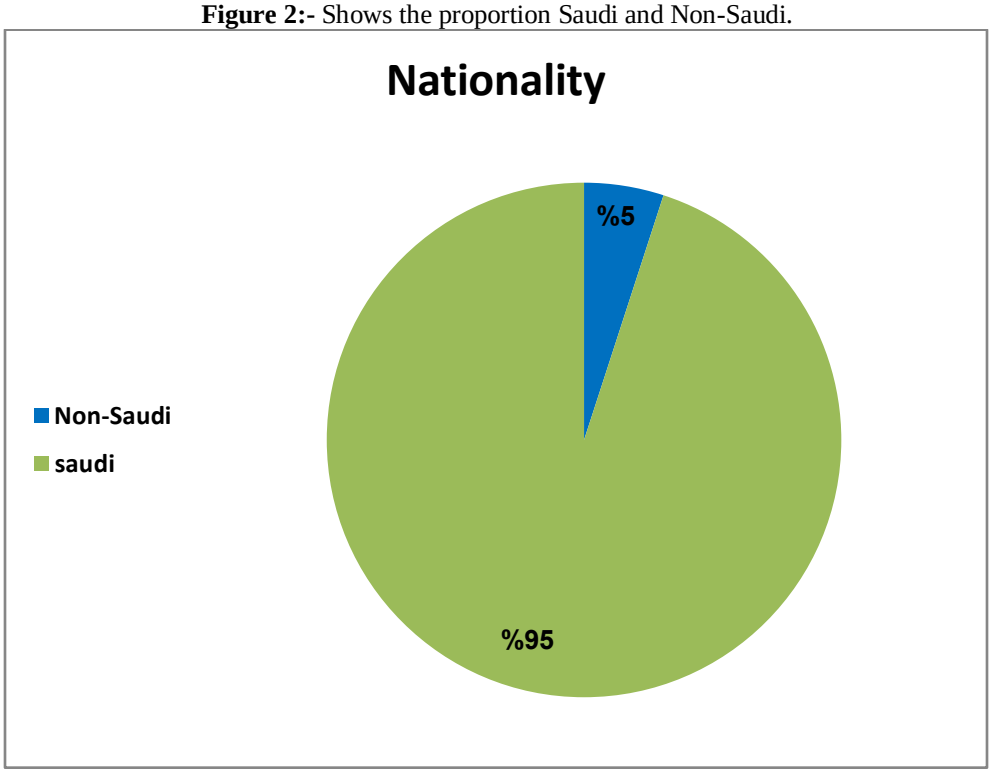
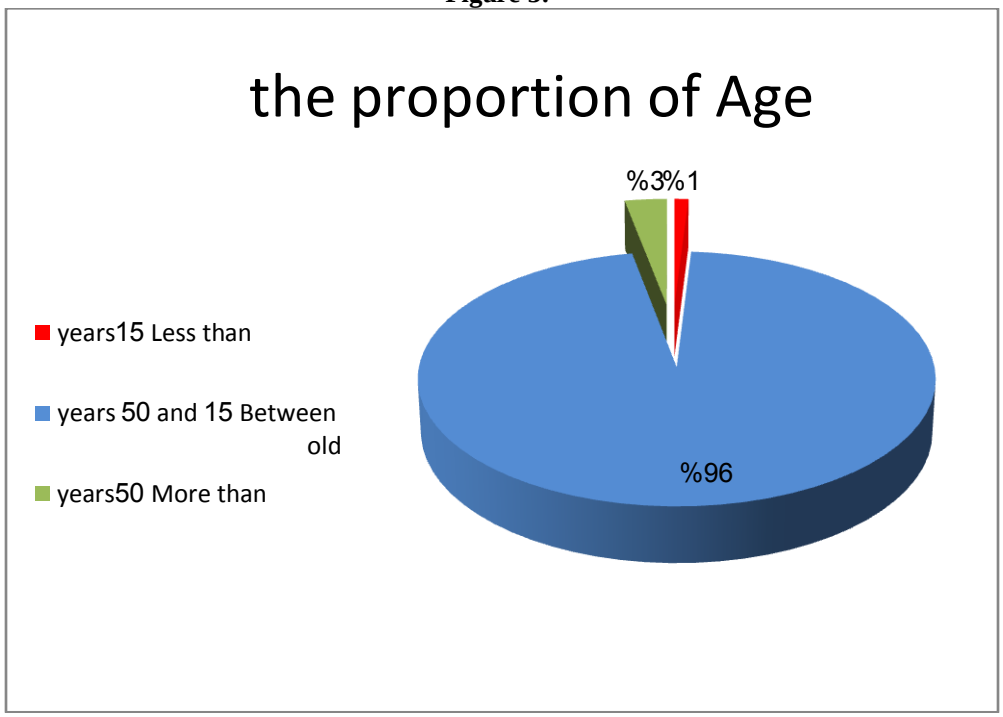


Figure 2:- Shows the proportion Saudi and Non-Saudi.



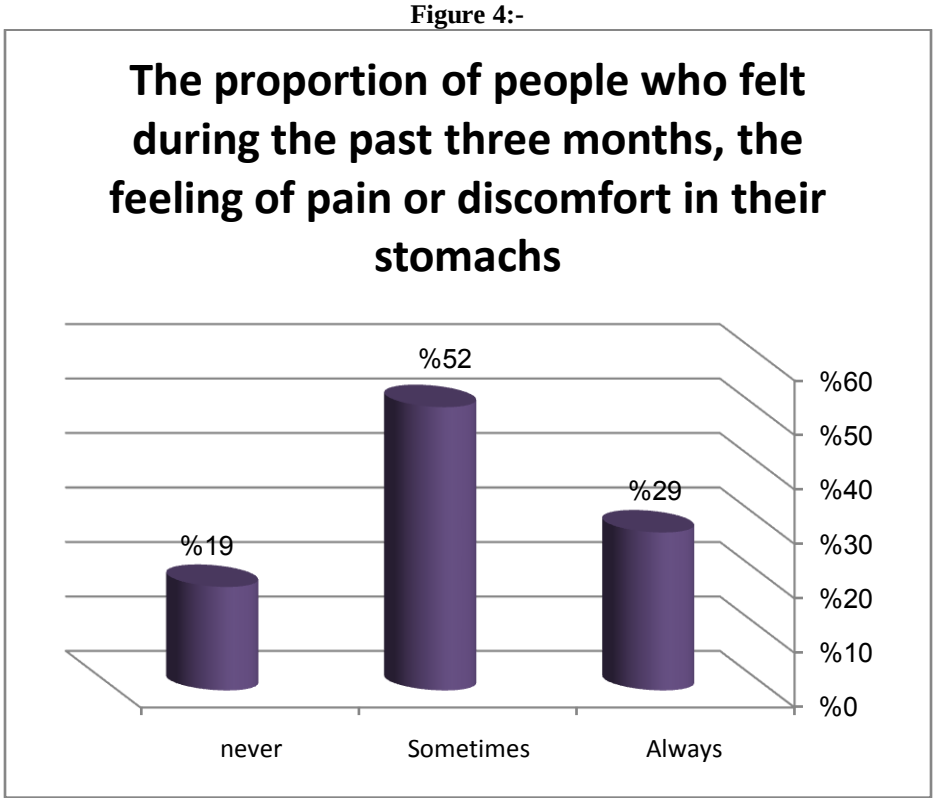
The majority of people 95% are Saudis
Theminority of people 5% are Non- saudis

Figure 3:-



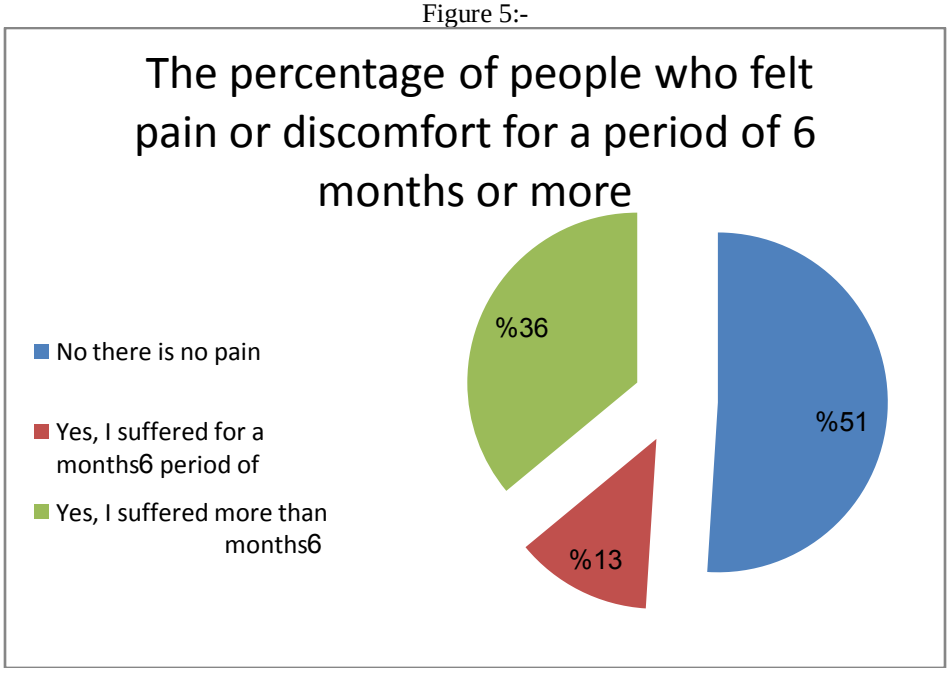
The vast majority of patient 96% aged between 15 and 50 years old
Theminority of patinet 3% agedover 50 years
The minority of patient 1% aged less than 15 years

Figure 4:-



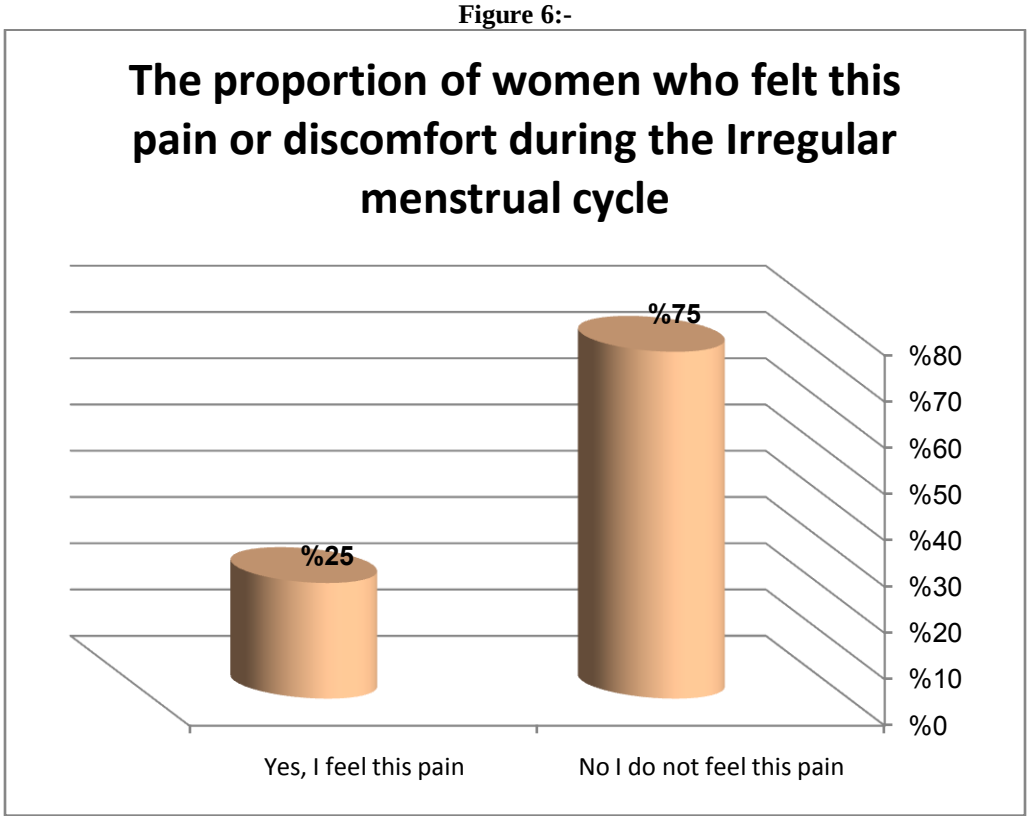
Themajority of people52% sometimestheyfeel of painordiscomfort in theirstomachs
Themidpoints of thepeople 29% theyAlwaysfeel of painordiscomfort in theirstomachs
Theminority of people 19% theyneverfeel of painordiscomfort in theirstomachs

Figure 5:-



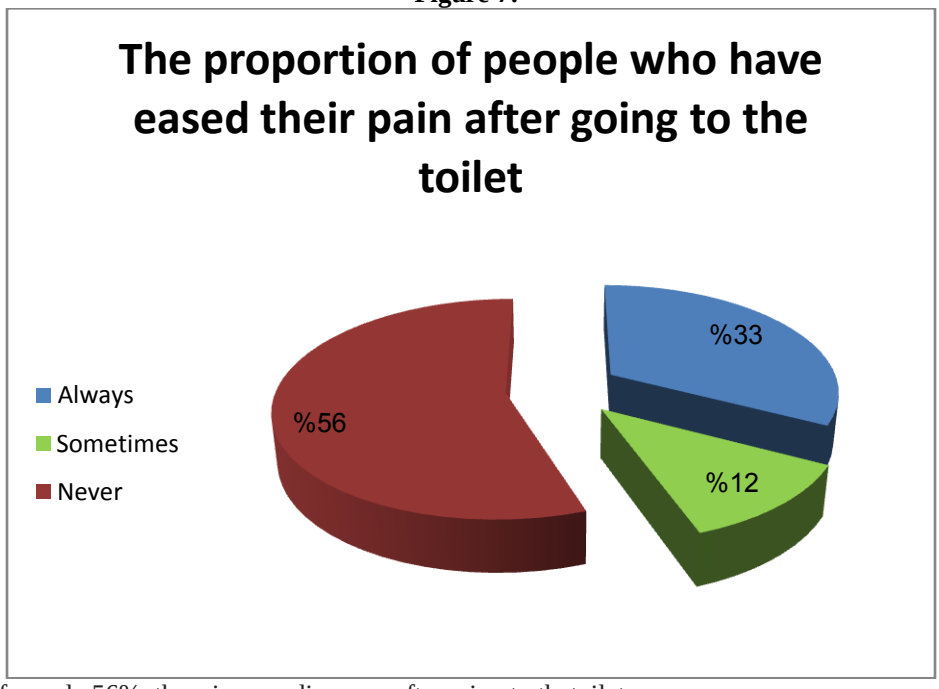
Themajority of people 51% They do nothavethepain
Themidpoints of people 36% theyFeltpainduringthe 6 months
Theminority of people 19% theyfeltthepain more than 6 months

Figure 6:-



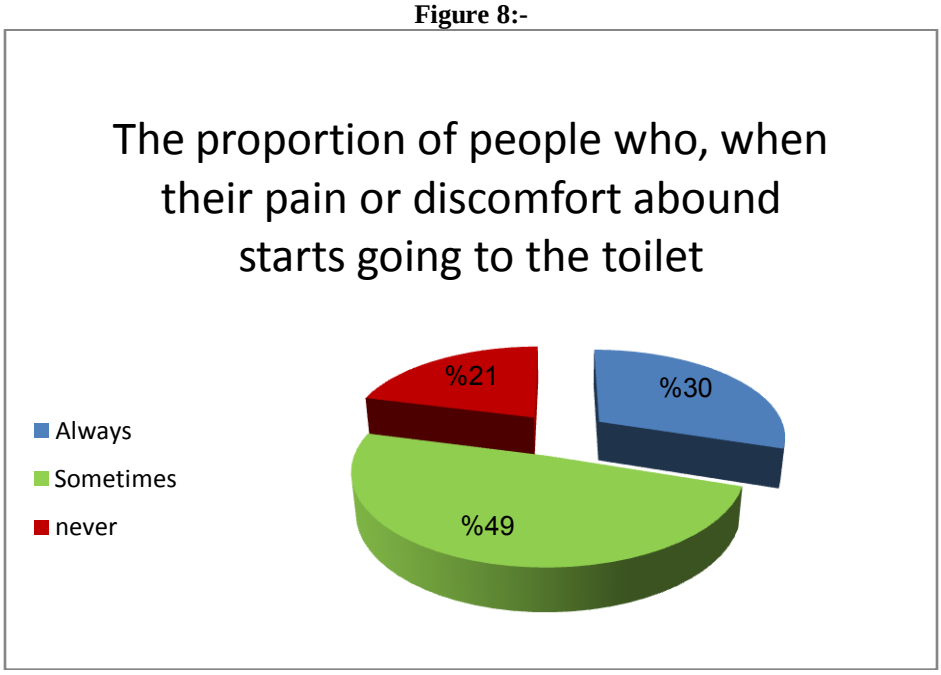
Themajority of women75% whotheydidnotfeelpainordiscomfortduringthe Irregular menstrual cycle
Theminorityof woman25% whotheyfeltpainordiscomfortduringthe Irregular menstrual cycle

Figure 7:-



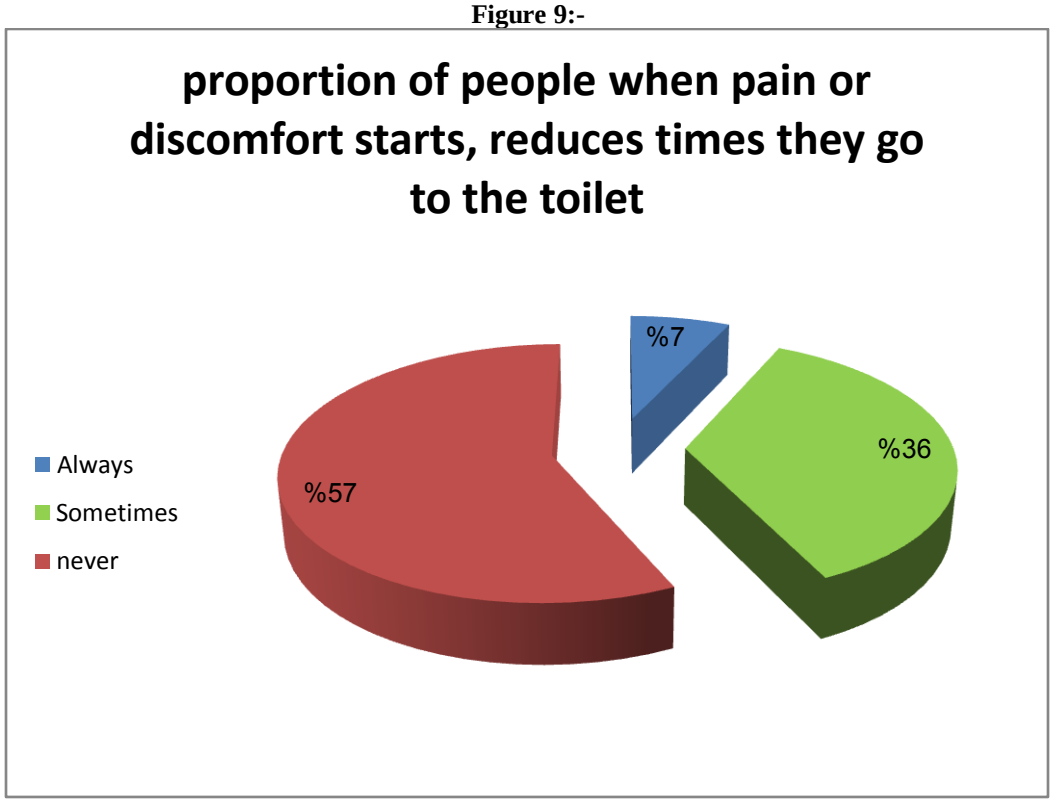
Themajority of people 56%, thepainneverdisappearaftergoing to thetoilet
Themidpoint of people 33% theirpainalwaysdisappearaftergoing to thetoilet
Theminority ofpeople 12 % sometimesTheirpaindisappearaftergoing to thetoilet

Figure 8:-



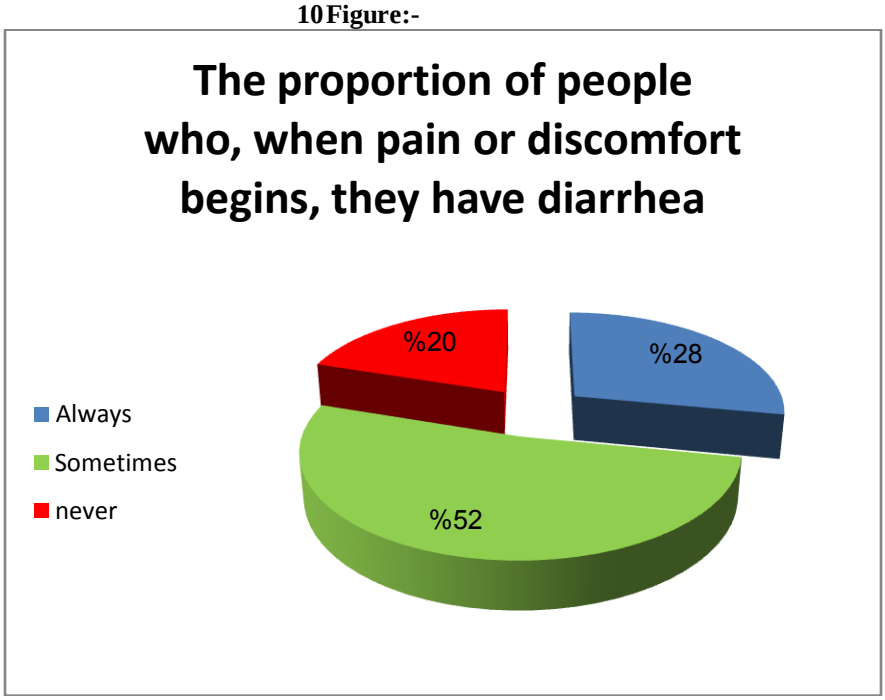
Themajority of people 49% sometimes,Increase
Themidpoint of people30% always,Increase
Theminority ofpeople 21% never,Increase

Figure 9:-



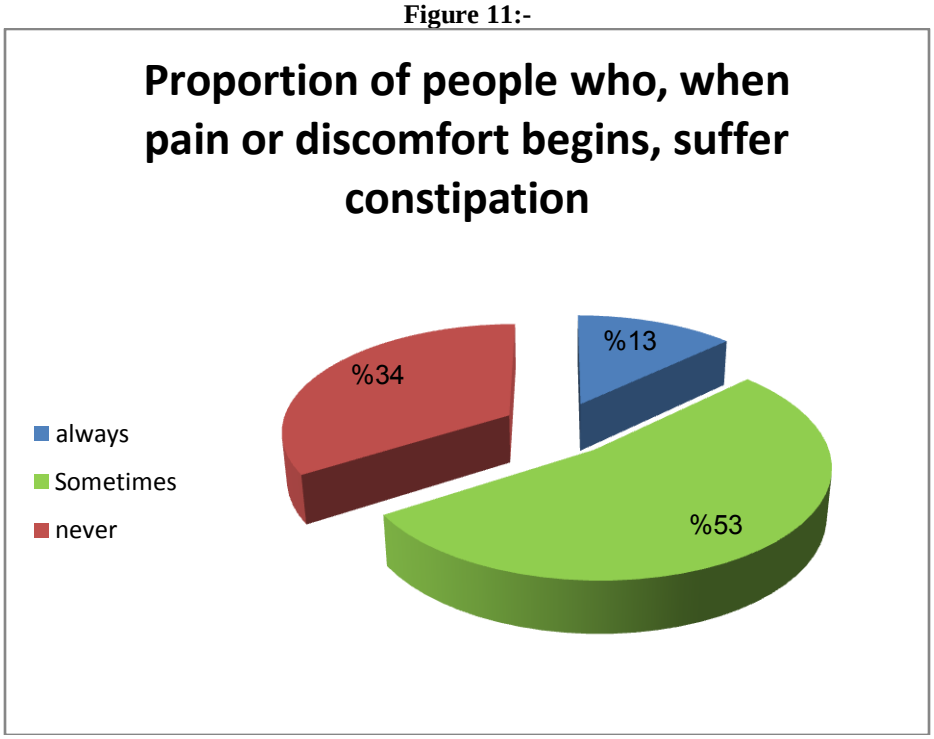
Themajority of people 57% neverDecreasethe times to go to thetoilet
The midpoint of people 36% sometimes Decrease the times to go to the toilet
The minority of people 7% Always Decrease the times to go to the toilet

10 Figure:-



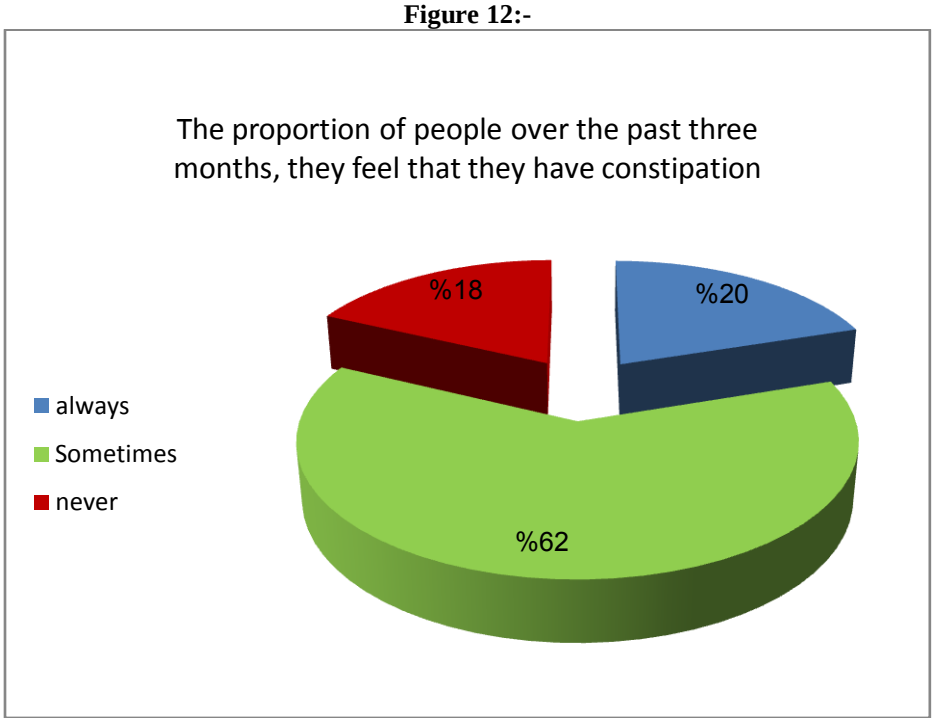
The majority of people 52% sometimes Suffer from diarrhea
The midpoint of people 28% Always Suffer from diarrhea
The minority of people 20% never Suffer from diarrhea

Figure 11:-



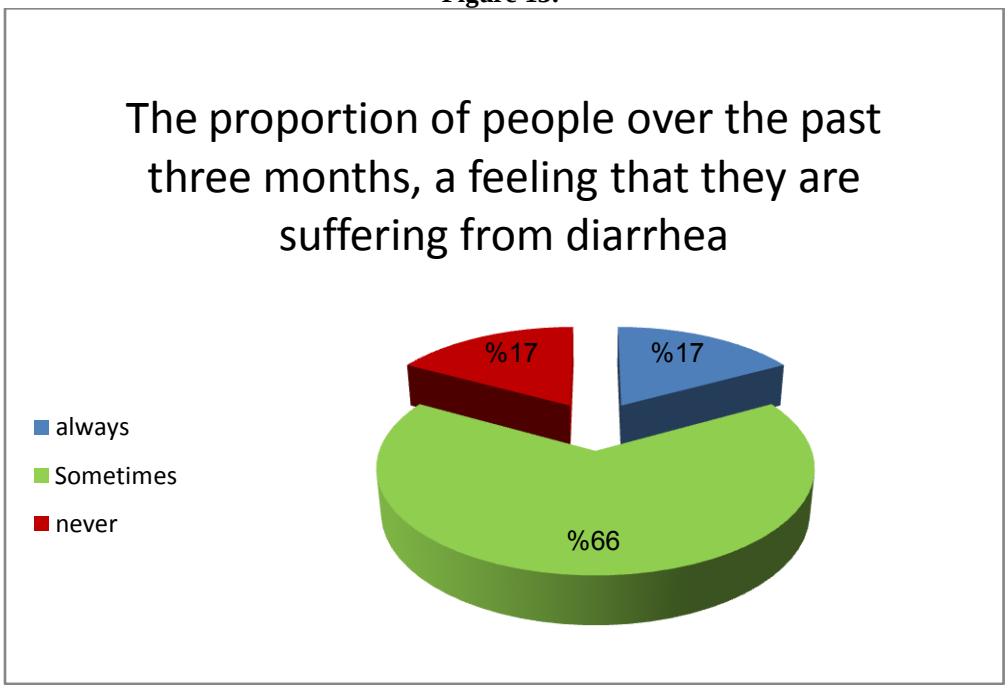
The majority of people 53% sometimes Suffer from constipation
The midpoint of people 34% never Suffer from constipation
The minority of people 13% always Suffer from constipation

Figure 12:-



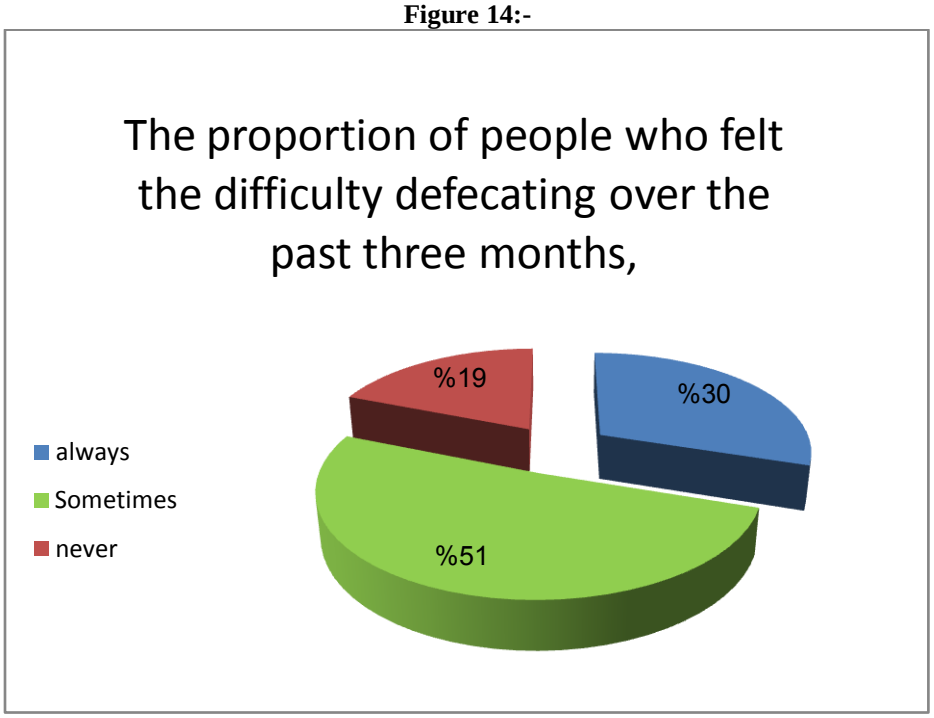
The majority of people 62% sometimesThey feel that they have constipation
The minority of people 20% always They feel that they have constipation
The minority of people 18% never They feel that they have constipation

Figure 13:-



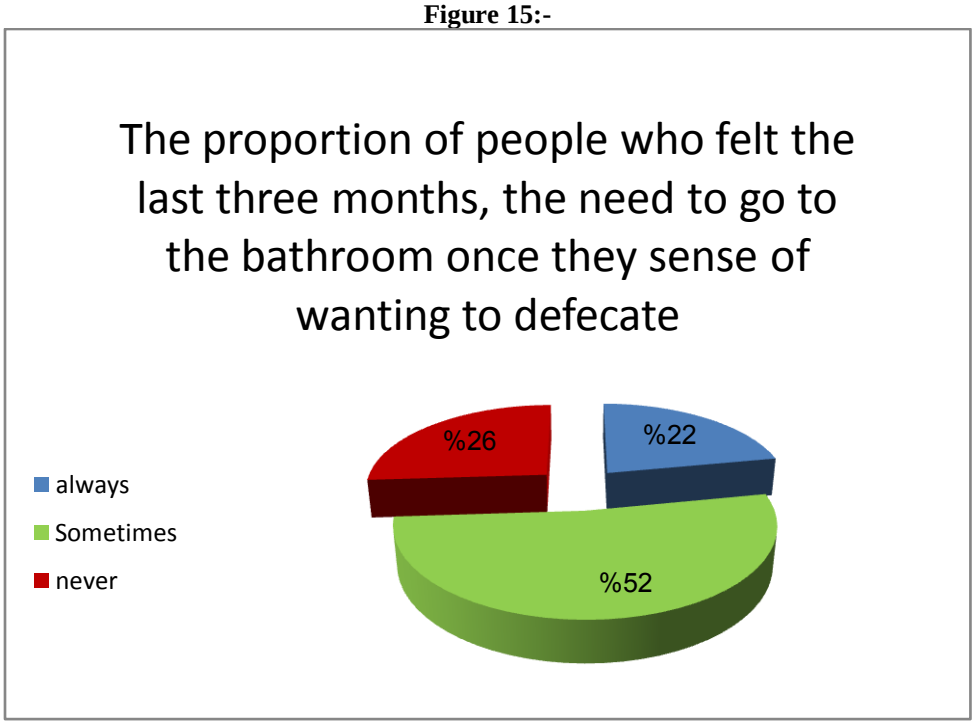
Themajority of people 66% sometimesTheyfeelthattheyhavediarrhea
Theminorityof people 17% alwaysTheyfeelthattheyhavediarrhea
And also17% formthepeopleneverTheyfeelthattheyhavediarrhea

Figure 14:-



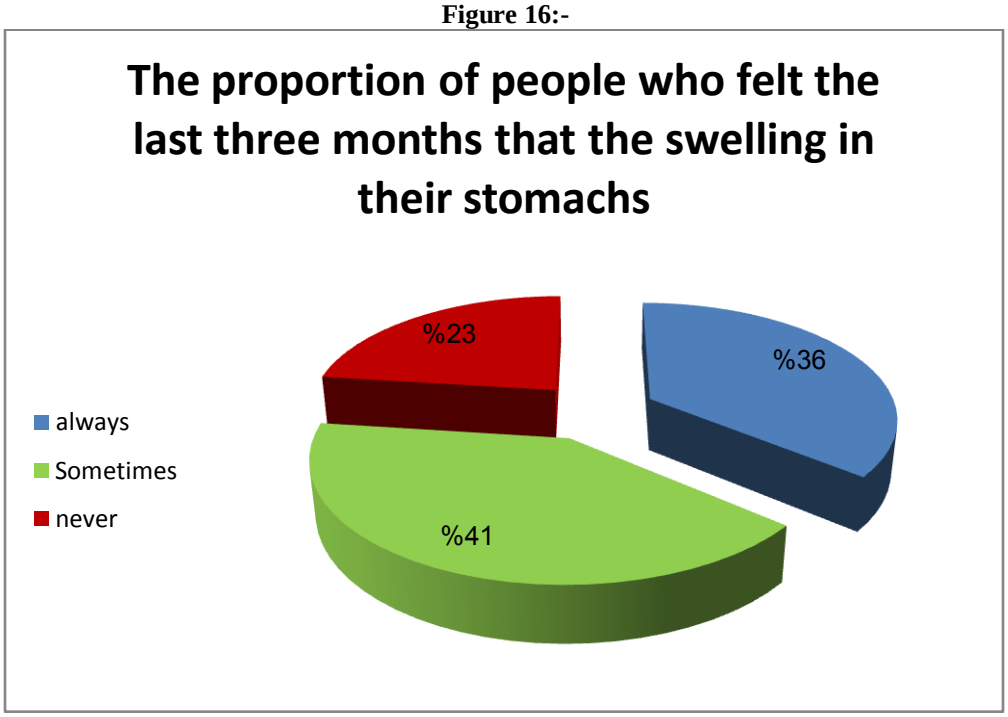
Themajority of people 51% sometimestheyFeeldifficultdefecation
The midpoint of people 30% they always Feel difficult defecation
The minority of people 19% they never Feel difficult defecation

Figure 15:-



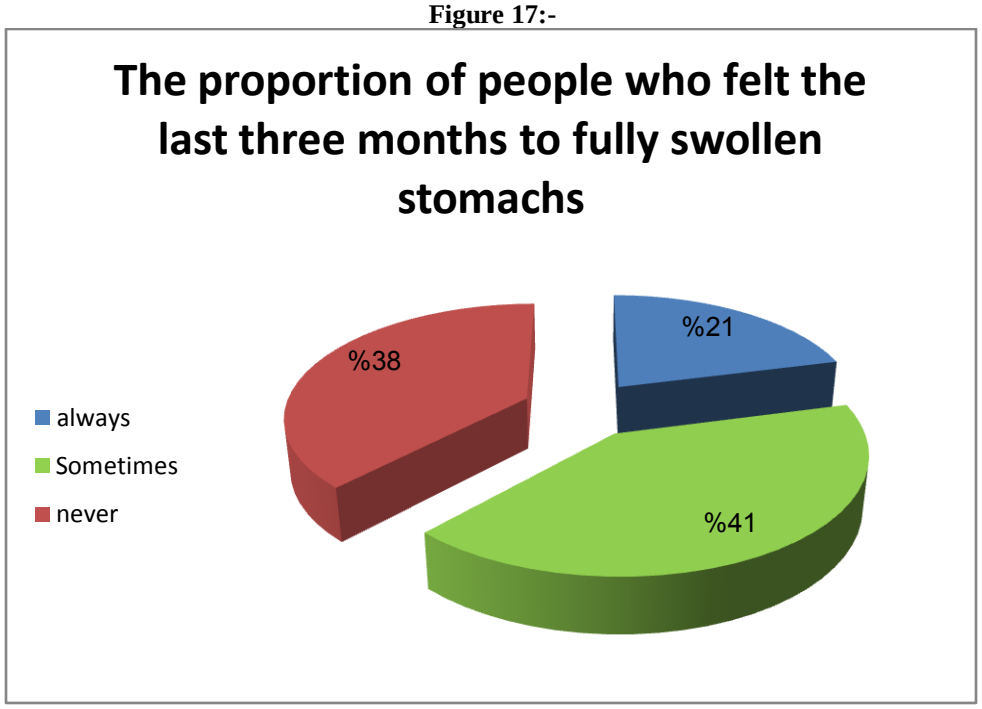
The majority of people 52% sometimesfelt they need to go to the bathroom
The minority of people 26% never felt they need to go to the bathroom
22% always felt they need to go to the bathroom

Figure 16:-



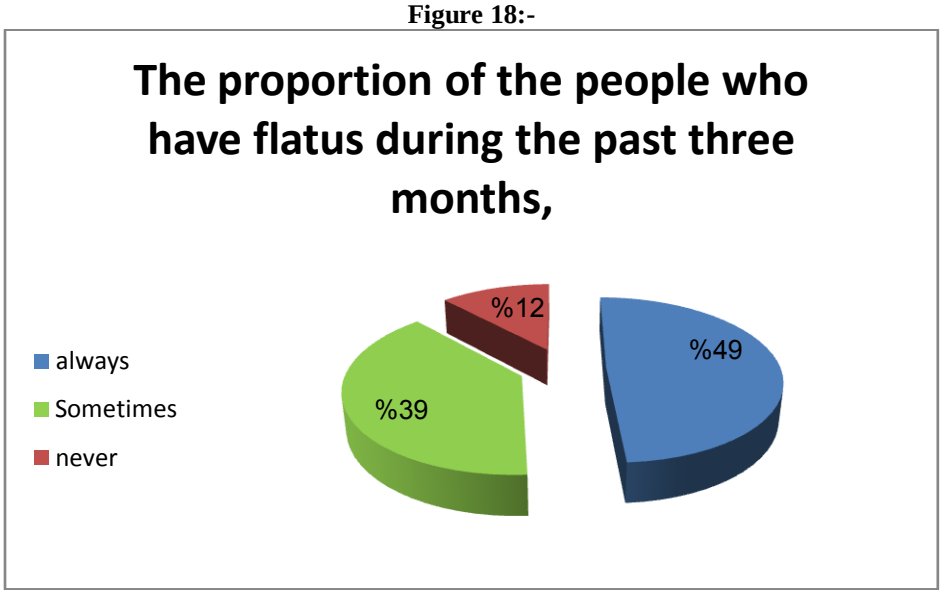
Themajority of people 41% sometimesTheyfeltthattheirstomachsswollen
The midpoint of people 36% They always felt that their stomachs swollen
The minority of people 23% They never felt that their stomachs swollen

Figure 17:-



Themajority of people41% sometimestheyFeltthatcompletelyswollenbelly
38% theyneverFeltthatcompletelyswollenbelly
Theminority ofpeople21 % theyalwaysFeltthatcompletelyswollenbelly

Figure 18:-

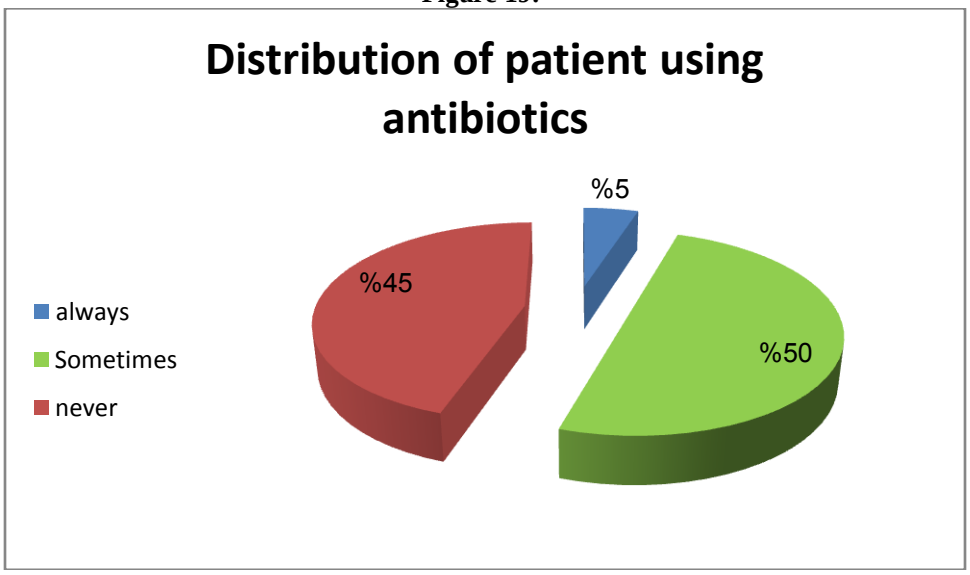


Themajority of people 49% always
Theyfeeltheyhaveflatus

Themidpoint of people 39% sometimes
Theyfeeltheyhaveflatus

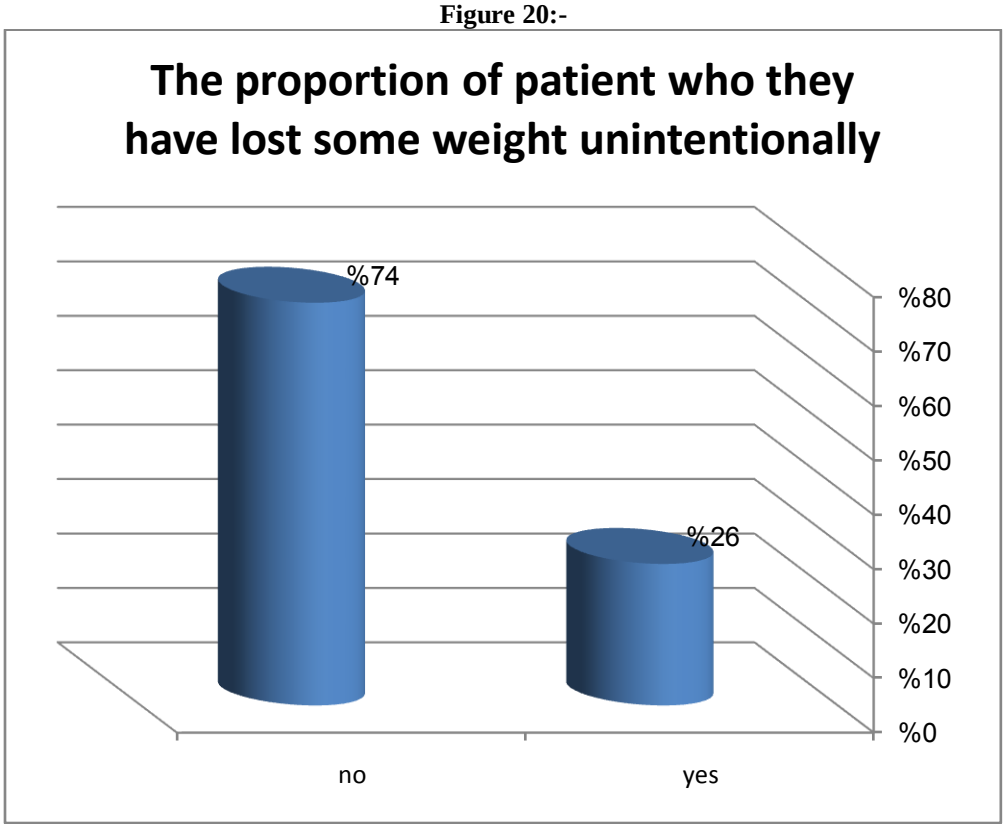
Theminority ofpeople 12% never
Theyfeeltheyhaveflatus

Figure 19:-



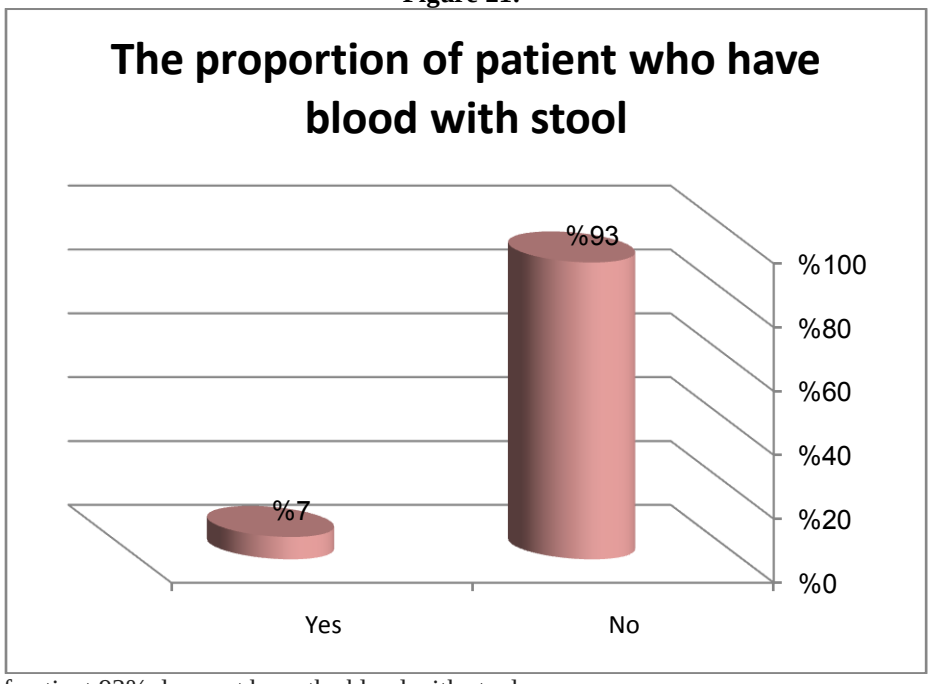
The majority of patient50% sometimes they are using antibiotics45% They never use antibiotics
The minority ofpatient 5% always using antibiotics

Figure 20:-



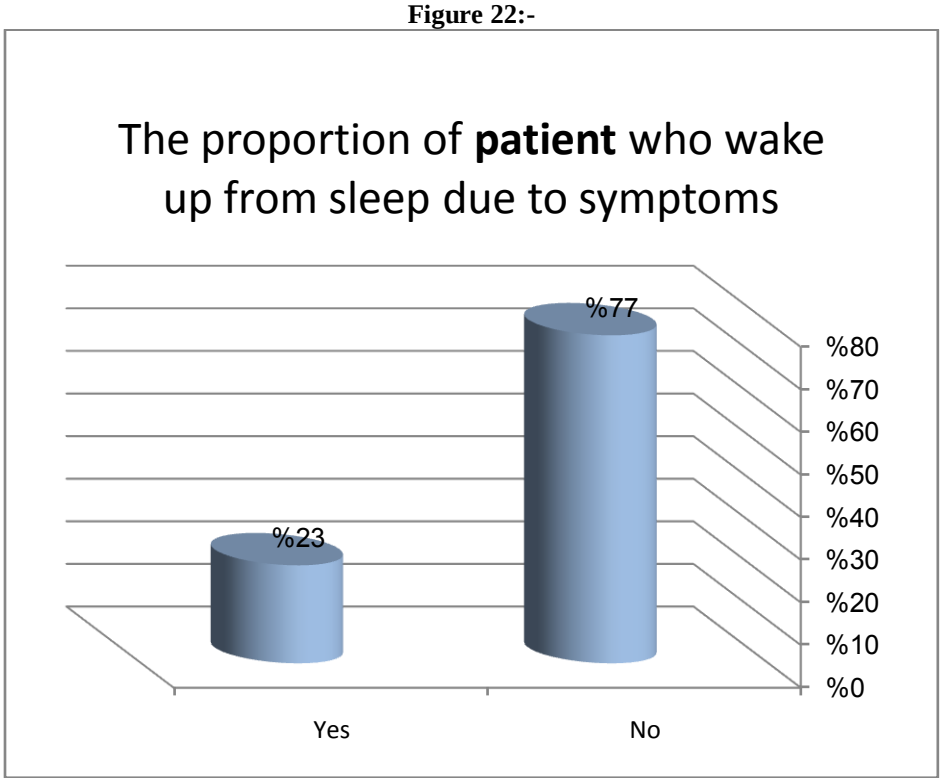
TheMajority of patient 74% theydidnot lose theirweight
TheMinority of patient 26% they lose theirweight

Figure 21:-



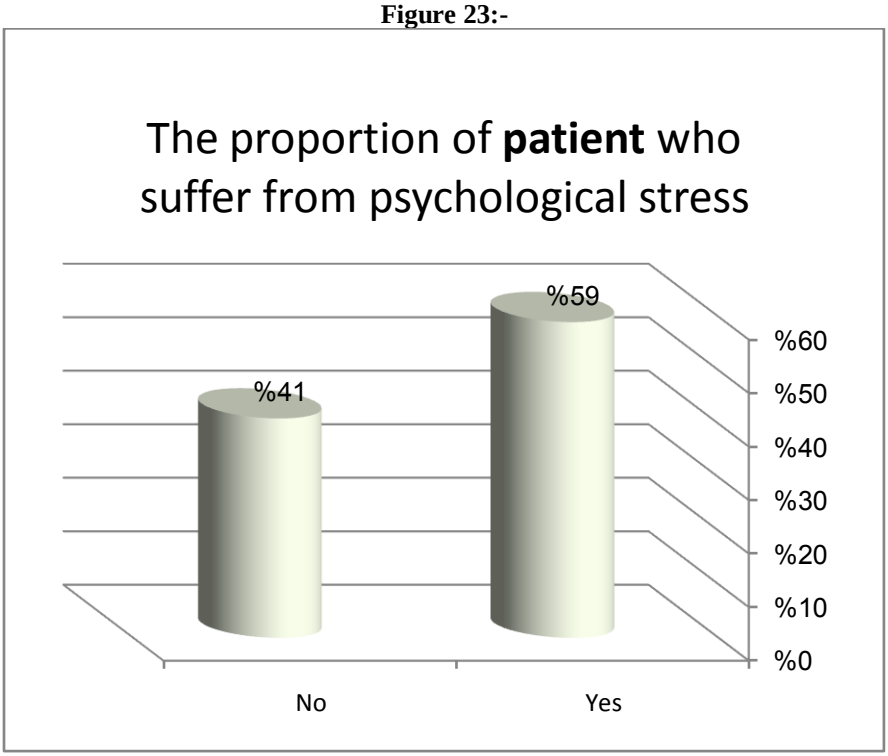
The Majority of patient 93% does not have the blood with stool
The minority of patient 7% they have blood with stool

Figure 22:-



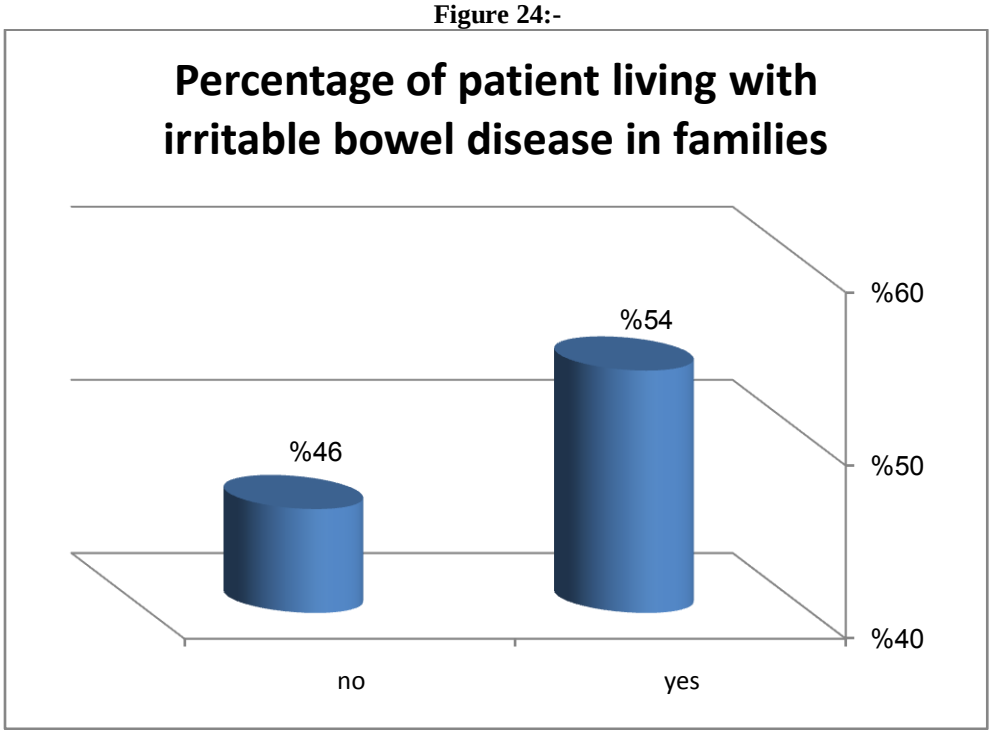
Themajority of patient 77% do notwake up fromthesymptoms
Theminority of patient 23% wake up because of symptoms

Figure 23:-



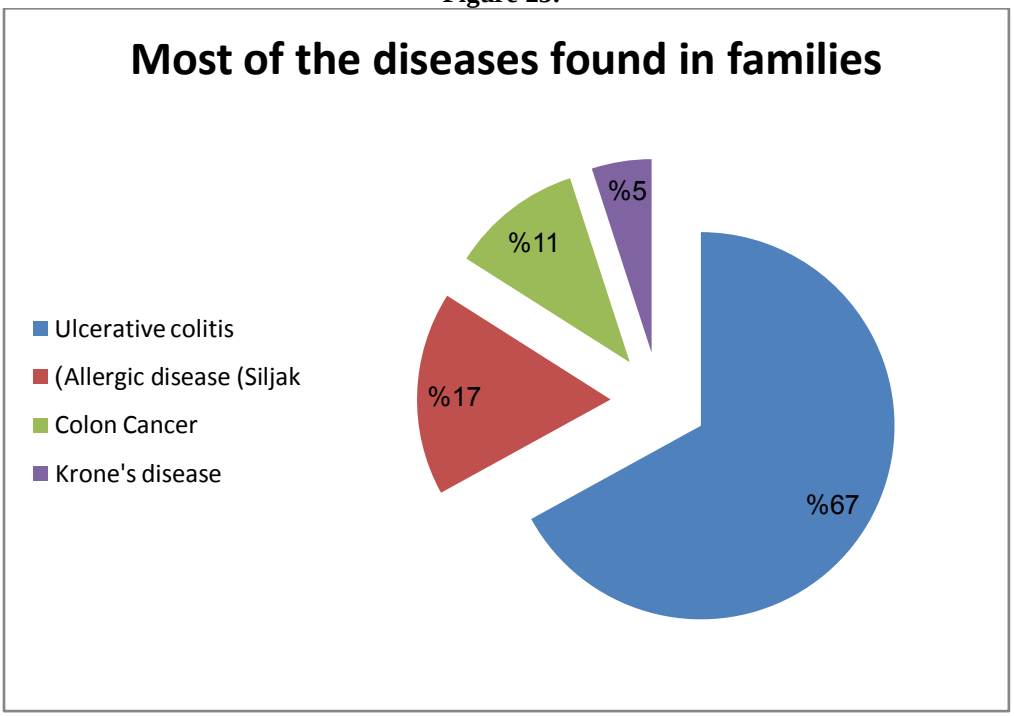
Themajority of people 59% sufferingfrompsychological stress
Theminority of people 41% do notsufferfrompsychological stress

Figure 24:-



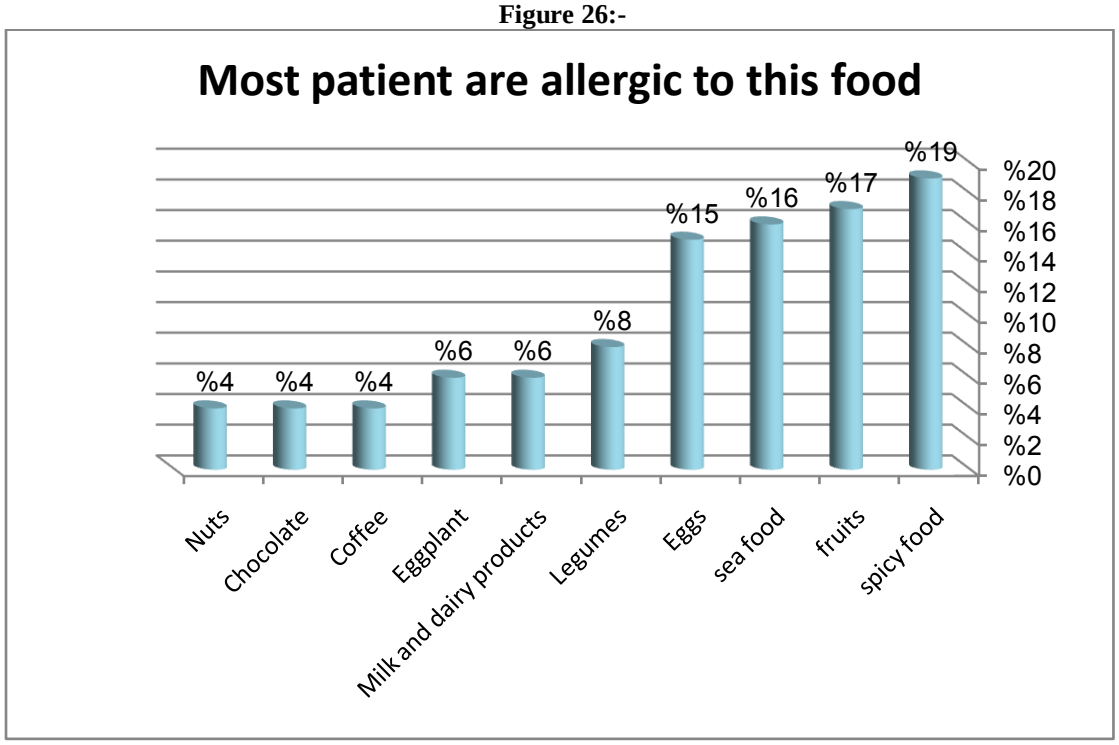
Themajority of patient 54%theyhavesomeone in theirfamilysufferingfrom irritable boweldisease
Theminority of patient 46% doesnothavesomeone in theirfamiliessufferfrom irritable boweldisease

Figure 25:-



67% of patient suffering from ulcerative colitis
17% of patient suffering from wheat allergy disease (Siljak)
11% of patientsufferingfrom colon cancer
5% of patientsufferfromCrohn'sdisease

Figure 26:-



19% of patient are allergic to spicyfood
17% of patient are allergic to fruits
16% of patient are allergic to sea food
15% of patient are allergic to Eggs
8% of patient are allergic to Legumes
6% of patient are allergic to Milk and dairyproducts
6% of patient are allergic to Eggplant
4% of patient are allergic to Coffee
4% of patient are allergic to Chocolate
4% of patient are allergic to Nuts

Discussion, conclusion, recommendation and limitation:-

This study is the first one encountered on IBS prevelance among general population in Almadinah , KSA . The present study revealed the prevalence of IBS in the studied sample to be 25.98%. A close prevalence of IBS in whole kingdom of Saudi Arabia also reported with prevalence of 25% and that may go with the similar region and culture. In other studies in different countries show Up to 20 %in USA{25}, 46% in mexico{26} and 43% in brazil{27} this might be interrupted by the variation in culture of different countries . general population were included in these studies, and their estimated prevalence included rome II criteria score between 25-30 . High prevalence rate was observed in mexico{26} The prevalence of IBS in our study is lower than the study ofCanada with prevalence of 6%{28}-.

There was significant association between gender and IBS in our study with (male to female ratio 2/1) shows that male have higher prevelance than females not like what other studies say{29} .

These findings are consistent with existing data that our hypothesis was “There is a strong family risk factor as 54% of patient have positive family history of IBS "

Limitations of the study:-

The sample may not necessarily be representative of all population in Saudi Arabia. One more limitation with anonymous self-reported questionnaires is inaccurate reporting.

Conclusion:-

Prevalence of Irritable bowel syndrome was higher in men and those who are in continues stress 60% and those people with stress have more frequent attacks . most of the patients have strong family history of IBS54% or other GI disease mostly ulcerative colitis 67%. 74% of the patients complaining of weight loss.Enhancing faculty preventive & curative health services is recommended. We recommend case-control studies to determine the risk factors .

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