

■ *Original Article*

Pattern of Abdominal Pain Presenting in a General Outpatient Clinic in Teaching Hospitals of Eastern Nepal

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Abstract

Introduction: Abdominal pain is a frequent presentation in any general clinic setting. Acid peptic disease, cholelithiasis, parasitic infestations, renal colic, urinary infection, hepatitis, infective diarrhoea, dysmenorrhoea, pelvic pain, gastrointestinal malignancy problems are just a few of the frequently encountered causes of these presentations. **Objectives:** 1. To describe the pattern of clinical presentations of abdominal pain in a general clinic, 2. To identify socio-demography profile of the patient presenting with abdominal pain. **Methods:** This was a cross-sectional study conducted in the general outpatient department (GOPD) of (BPKIHS) a teaching hospital for a period of three months. The record of all abdominal pain cases presenting to GOPD together with the diagnosis recorded by various doctors of GOPD. **Results:** The greater prevalence of pain abdomen in female (55%) were 20-39 years group and in male (35%) were in 40-59 years group. When compared to all cases of abdominal pain in which females (58%) were predominant more in this study, the most common site for pain was central abdomen. **Conclusion:** The study showed that the female gender were predominant in the case of abdominal pain compare to male group and according to the occupation house were predominant.

Keywords: abdominal pain, BPKIHS, pain.

Introduction

Abdominal pain is a frequent presentation in any general clinic setting. In a sample of General Outpatient diagnoses of consecutive patients in blocks at quarterly intervals over a year, 216/1185 (18%) patients had conditions which normally had abdominal pain as a feature. Abdominal pain is frequently associated with psychological conditions including anxiety, depression and somatisation disorder¹. The general practitioner's diagnostic strategy will vary according to the degree of acuteness, and warning features that may be apparent as the patient walks in the door³. Abdominal pain may be categorized as acute, sub-acute, chronic or recurrent. The cause may be medical, surgical, gynaecological, urological,

musculoskeletal and psychological. Medical conditions may be infective, neurological, cardiovascular, metabolic, toxic and gastroenterological². Abdominal pain is frequently associated with psychological conditions including anxiety, depression and somatisation disorder. In most of the cases psychogenic factors are thought to be responsible for chronic abdominal pain when no specific pathology is found³. The majority of abdominal pain presentations in general practice will not require urgent referral. The general practitioner will often order simple tests and prescribe simple treatment at the first visit. Depending on results of tests and the effects of treatment, further investigations may be warranted. The doctor will make a provisional diagnosis of anxiety or depression or somatisation on many occasions, while still arranging other tests to exclude serious pathology^{6, 10}

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Materials and methods

This was a cross-sectional study conducted in the general outpatient department (GOPD) of BPKIHS for a period of three months. The record of all abdominal pain cases presenting to GOPD together with the diagnosis recorded by various doctors of GOPD over a time period. All patients were ordered basic investigations including blood count and haemoglobin, stool examination for ova of parasites and occult blood, routine urine examination and USG of abdomen and pelvis as was clinically appropriate. All cases of pain abdomen were included. Children below twelve years were excluded. Data collection was done with the help of a questionnaire based pro forma with both open and closed ended questions. Data collected on paper forms was entered into MS Excel spreadsheet and analysed in Excel and SPSS version 12.

Results

A total of 300 cases with pain abdomen were taken. The greater prevalence of abdominal pain abdomen in 20-39 was seen years in female age group, where as in male, 40-59 age group was more prevalent as shown in table -1

Table-1: The distribution of cases by age and sex (n=300)

Age-group	Male n=122	Female n=178
10 – 14 yrs	8 (6.5%)	10(6%)
15 – 19 yrs	36(29.5%)	24(13%)
20 - 39 yrs	30(24.5%)	98(55%)
40 – 59 yrs	42(35%)	40(23%)
60 + yrs	6(5%)	6(3%)
Total	122(100%)	178(100%)

According to the table 2, the pattern of causes of abdominal pain presenting in GOPD, were dyspepsia, anxiety and epigastric symptoms.

Table 2: Diagnosis of 300 cases of abdominal pain in GOPD

GASTROINTESTINAL		
Dyspepsia /Indigestion	30	10.0%
DU/PU	28	9.3%
Cholecystitis/ gall stone	11	3.7%
Constipation	9	3.0%
Irritable Bowel Syndrome	39	13.0%
Parasites	13	4.3%
Total GI	130	43.3%

GENITOURINARY		
Dysmenorrhoea	9	3.0%
Urinary calculus	12	4.0%
Pain in testis/ inguinal region	18	6.0%
UTI	22	7.3%
Pelvic Pain/ PID/ Vaginal		
Discharge	24	8.0%
Total GU	85	28.3%
PSYCHIATRIC CAUSES		
Somati form disorder	15	5.0%
Anxiety	5	1.7%
Depression	11	3.7%
Total Psychiavtric causes	31	10.3%
OTHER		
Abdominal pain/ cramps	24	8.0%
Pregnancy	5	1.7%
Other	7	2.3%
Epigastric pain	18	6.0%
Total other	54	18.0%
GRAND TOTAL	300	100.0%

When compared to all cases of abdominal pain, females were predominant in this study as shown in figure-1 below.

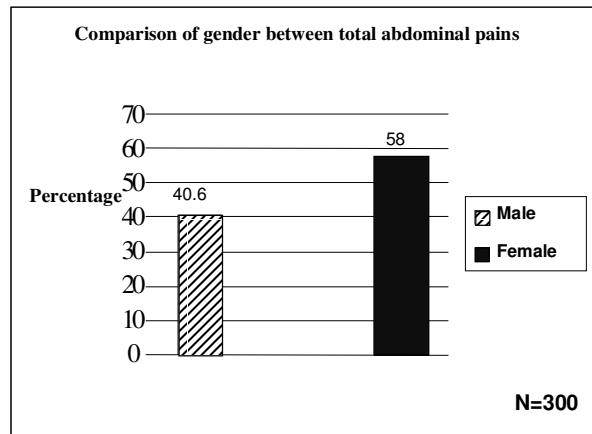


Figure 1: Gender distribution of abdominal pain

The occupation of respondents is shown in Table 3. Among females, it was common among housewives and among males in farmers. Students were prominent among the cases.

Table-3 .Occupation of the respondents

OCCUPATION	Number	Percent
Housewife	88	29.3
Farmer	14	4.6
Labourer	48	16
Driver	32	10.6

Business	26	8.6
Student	79	26.3
Professional	13	4.3
Total	300	100

Most common site for abdominal pain was in the central followed by left lower quadrants of the abdomen, as shown in fig. 2

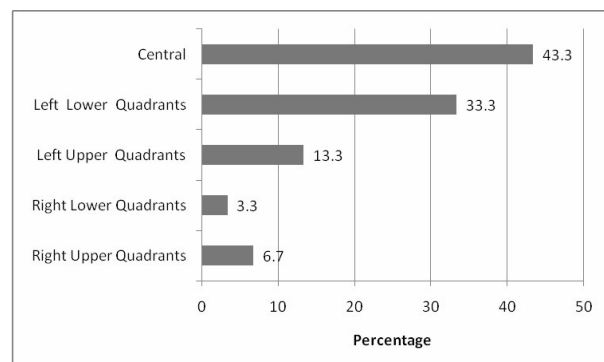


Figure 2: Site of pain (n=300)

Discussion

The study showed that the predominant age group of people presenting to the GOPD room with pain abdomen was 20-40 years, with female preponderance, which is similar to the finding in other studies of IBS^{4,7}. This is at par with another study in General Practice settings in Australia (BEACH) that showed the patients presenting with abdominal pain were more likely to be female and younger than average for all encounters^{5,6}. The study also showed that the causes of abdominal gastrointestinal, genitourinary, psychiatric and others in order. Another BEACH study in Australia showed a similar ranking.⁵ More specifically, the breakdown of diagnoses in the study was presumed dyspepsia (epigastric pain, dyspepsia and DU/GU) 25.3%. It is interesting to note the apparently higher prevalence of dyspeptic symptoms in the general clinic presentations in Nepal compared to Australia, where gastroenteritis was the most common presentation.

An American series of 556 cases of abdominal pain seen in family practice could be broken down into the following diagnostic groups: undocumented 50%, acute gastroenteritis 9%, urinary tract infection 7%, irritable bowel syndrome 6%, pelvic inflammatory disease 4%, hiatus hernia or reflux 2.3%, diverticulitis 2.2%, diarrhoea (cause undetermined) 1.6%, cholelithiasis 1.6%, tumour benign 1.4%, duodenal ulcer 1.4%,

urolithiasis 1.3%, appendicitis 1.1%, ulcerative colitis 0.9%, muscular strain 0.9% and others 9.5%.³

The study are at BPKIHS showed that the patients presenting with abdominal pain were more commonly female, with male to female ratio of 40.6%, to 58%. Similarly, the abdominal pain are more common among farmers, followed by students. In females abdominal pain was more common among those doing home duties and in males it was more common in farmers. There is no comment in the literature about occupation but it is said that anxiety is a major accompaniment of symptoms of functional bowel disorder and stresses of daily life have been strongly linked with abdominal pain⁸

Central abdominal pain was noticed in 43.3% patients, followed by pain over the left lower quadrant 33.3% and the remainder in various other sites. In the study done by Swarbrick et al showed that the pain was felt predominantly in the central, lower, and left abdomen in the patients presenting with abdominal pain.⁹

Limitations of the study: The study used referred cases and may be subject to interobserver variations. Hospital based study using convenient sampling technique increased the participation rate but may not exactly represent general population. Due to less number of studies conducted in this region comparisons with other studies were not possible.

Conclusion

Our study showed that the majority cases of abdominal pain were in female age group 20-39 years group. When compare with gender female gender were predominant and when compare with occupation housewife suffer more in abdominal pain. The most common pattern of abdominal pain presenting in Gopd were dyspepsia, anxiety, epigastric pain and common site of abdominal pain were central region of abdomen.

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