Evaluation of the Results to Digestive Endoscopy Patients in Azadi Teaching Hospitalin Kirkukcity

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Abstract

Background: Esophagogastroduodenoscopy (EGD)endoscopic findings, such as esophagitis, bleeding, ulcer and malignancy, represent a public health problem.

Aims: To evaluate patients results after doing digestive endoscopy and to determine the, characteristics and results of endoscopy among patients in Kirkuk city hospitals.

Methodology: The samples purposively collected from the patients who referred for Esophagogastroduod endoscopy unit in Azadi teaching hospital in Kirkuk city for period from one September 2016 to the 12th September 2018. The study sampled consist of (70) patients with digestive diseases were selected (male & female). A questionnaire was developed for purposive of study & included 2 parts were demographic data, endoscopy characteristics. The data were arranged for, age,gender, residence and the results of the procedure.

Results: The age group (20-29) years was represent (31.4%) of the sample, the female represent (64.3%) from the sample, the residence (70.0 %) were living in urban and the frequency of endoscopy is majority of the sample (72.9%) were scheduled for two time.

Conclusion: The study showed highest percentage endoscopic finding gastritis and cancer for indication and repeated vomiting for complication.

Recommendation: The study recommended promote best health practices and early nursing management optimized for the endoscopy of G.I.T disease to reduce damage and prevent complications.

Keyward: *Evaluation, Digestive Endoscopy.*

Introduction

Philipp Bozzini was the first one who developed endoscope technology in 1806 in German Mainz utilizing "for the examinations of the canals and cavities of the human body"[(1)]. At the beginning of the eighteenth century a flexible fibrotic type of endoscope and since that became as part of standard practice in medicine and Gastrointestinal tract endoscope which is characterized by easiness and safety with a highly valuable assistance method in diagnostic and therapeutic. Further to the that low in cost and mortality[(2)]. Aforementioned technology can be used to examine gastrointestinal (GI) symptoms such as difficulty swallowing, abdominal pain, nausea, vomiting and hemorrhage. Another utilizing is diagnosed by taking a biopsy investigating GI system for inflammation, bleeding, anemia, tumors and bleeding. The third use can be used for treatment expanding narrowed esophageal, bleeding vessel cauterization and cutting off an extra or a foreign bodies removing[(3)]. Peptic ulcer (duodenal and viscus ulcer) is common in men and prevalence is distended with age with a top prevalence of twenty eight point eight% in five the last decade of life[(4)]. The examination of endoscopic is vital, evaluating and managing higher and lower canal issues. Organic process disorders are very frequent inside the normal population [(5)]. The function of endoscopy in bleeding peptic ulcer disorder is critical. It is a positive device in diagnosis, prognostication and medical aid of harm ulceration. The desires of excellent endoscopy – receipt of an accurately indicated procedure, a right diagnosis and excellent care have to be done with the minimal threat to the patient

and take place in a properly – geared up facility staffed through true education and in a position endoscopists[6]. Bleeding is the 1st danger of issues after an endoscopy is expanded if the technique involves casting off a piece of tissue for trying out (biopsy) or treating a digestive device problem. The second danger is the infection in most endoscopies that consist of an examination and biopsy and risk of contamination is low and in the end danger is tearing of the gastrointestinal tract. The risk will increase if the extra procedures such as dilation to widen esophagus, are carried out[5].

Methodology

Design: To descriptive design was applied in the present study to achieve the objectives was from one September 2016 to the 12th September 2018.

Sampling: A Purposive sampling of (70)sample selected from the patients were attended hospital according to following criteria:Patient who done the endoscopy in any part of GIT system, where, male and female with ages ranged between (10- 60 and over).

Setting: The present study was conducted at azadi teaching hospital which receiving large number of patient who have GIT endoscopy done for them for diagnosis or treatment.

Tools: A questionnaire was adopted and developed for the purpose of the study, it comprises of (2) parts, part (I) included demographic characteristic of patients which consists of (9) items. It includes (age, gender, residence, marital status, educational Level, occupation, smoking, NSAID, number of endoscopy). Part (II) endoscopy characteristics. This part was concerned with the patients characteristics about endoscopy. It comprised of(36)items . That's classified as the following: Endoscopic organ site use, Indication of endoscopy, Reason of endoscopy, Result of endoscopic and Complication after GIT endoscopy. All items were measured by using 3-likert scale option were used in the rating scale as(Always, Sometime, Never) . The data were collected through the utilization of constructed questionnaire, interview technique with the patients in hospital. The data Was collected between (21thNovember in 2016 to 29th March in 2017).

Data Analysis: Data were analyzed by using descriptive statistics, which include Descriptive statistical method (Frequency, percentages and Mean of score) and Inferential statistical method (ANOVA), by using; Statistical Package for Social Science (SPSS) version (23) is used for data analysis at (P.value ≤ 0.05).

Results

Table (1): Distribution of the Socio-Demographic Characteristic of the Study Sample (No=70).

Variable	Frequency	Percentage
Age		
20-29	22	31.4
30-39	10	14.3
40-49	10	14.3
50-59	16	22.9
60 and above	12	17.1
Total	**70**	**100.0**
Gender		
Male	25	35.7
Female	45	64.3
Total	**70**	**100.0**
Residence		
Urban	49	70.0
Rural	21	30.0
Total	**70**	**100.0**
Marital status		
Single	20	28.6
Married	46	65.7
Widow	4	5.7
Total	**70**	**100.0**
Level of education		
Illiterate	11	15.7
Read and write	9	12.9
Primary	17	24.3
Secondary	10	14.3
Institute	9	12.9
College	14	20.0
Total	**70**	**100.0**
Occupation		
Employee	17	24.3
House Wife	29	41.4
Jobless	11	15.7
Free Work	6	8.6
Student	7	10.0
Total	**70**	**100.0**
Smoking		
Yes	45	64.3
No	25	35.7
Total	**70**	**100.0**

Variable	Frequency	Percentage
NSAID		
Aspirin	12	17.1
Ibuprofen	30	42.9
Induced	10	14.3
More than one	18	25.7
Total	**70**	**100.0**
Number of endoscopy		
1Time	14	20.0
2Time	51	72.9
3 Time	5	7.1
Total	**70**	**100.0**

Table (1) indicates the socio-demographic characteristics of the whole study sample. The it shows that the highest percentage of age groups is between (20-29 years) and constituted (31.4 %) and according to gender, the high percent was of females and constituted (64.3%). With regard to residence, (70.0%) of patients were living in urban areas, most of the patients were married and constituted (65.7%). (24.3 %) of the sample were primary school,As regard to occupation, (41.4 %) patients were housewives. With relation to smoking, the majority of the subjects (64.3%) were smokers. The high percent in ibuprofen and constituted of (42.9%), were NSAID. Finally, in respect to the frequency of endoscopy, the majority of the sample (72.9%) were scheduled for two time.

Table (2) Mean of scores for objects of patients' endoscopy concerning the organ site use of endoscopy.

Endoscopic Organ site Use	Always		Sometime		Never		MS
	f	%	f	%	f	%	**1.7286**
Esophagus	15	21.4	21	30.0	34	48.6	2.8429
Stomach	63	90.0	3	4.3	4	5.7	1.8571
Duodenum	19	27.1	22	31.4	29	41.4	1.3429
Colon	8	11.4	8	11.4	54	77.1	

Table (2) indicates that the mean of score was highly significant inobjects (2) and moderately significant inobjects (3) and low significant in objects(1-4) .

Table (3) Mean of scores for items of patients' endoscopy regarding the indication of endoscopy.

Indication For Endoscopy	Always		Sometime		Never		MS
	f	%	f	%	f	%	
Infection	35	50.0	13	18.6	22	31.4	2.1857
Paralytic illus	6	8.6	20	28.6	44	62.9	1.4571
A dhescion or rupture of bowel	5	7.1	13	18.6	52	74.3	1.3285
Hemorrhage	16	22.9	15	21.4	39	55.7	1.6714
Spasm and obstruction of the bowel	24	34.3	22	31.4	24	34.3	2.0000
Stress and life style	28	41.4	9	12.9	32	45.7	1.9571

Table (3) indicates that the mean of score was moderately significant in items (1-5-6) and low significant in items (2-3-4) .

Table (4) Mean of scores for matter of patients' endoscopy as regards the reason of endoscopy.

Reason For Endoscopic	Always		Sometime		Never		MS
	f	%	f	%	f	%	
Haemtemesis-Millennia	15	21.4	16	22.8	39	55.7	1.6571
Acute–Chronic Epigastria	50	71.4	2	2.9	18	25.7	2.4571
Chronic constipation	10	14.3	19	27.1	41	58.6	1.5571
Chronic Diarrhea	10	14.3	12	17.1	48	68.6	1.4571
Alternating Bowel motion	13	18.6	18	25.7	39	55.7	1.6286
Abdominal mass	2	2.9	14	20.0	54	77.1	1.2571

Table (4) indicates that the mean of score was highly significant inmatter (2) and low significant in matter(1-3-4-5-6).

Table (5) Mean of scores for substance of patients' endoscopy about the result past endoscopy.

Result After Endoscopic	Always		Sometime		Never		MS
	f	%	f	%	f	%	
Previous bleeding	9	12.9	17	24.3	44	62.9	1.5000
Gastritis	31	44.3	6	8.6	33	47.1	1.9714
Ulcer	14	20.0	17	24.3	39	55.7	1.6429
Esophagitis	12	17.1	15	21.4	43	61.4	1.5571
Bleeding Duodenal and Ulcer	9	12.9	7	10.0	54	77.1	1.3571
Mass in G.I.T	3	4.3	12	17.1	55	78.6	1.2571
Celiac Disease	5	7.1	24	34.3	41	58.6	1.4857
Esophageal	5	7.1	19	27.1	46	65.7	1.4143
Esophageal Cancer	55	78.6	11	15.7	4	5.7	1.2714
Gastro Duodenititis	34	48.6	20	28.6	16	22.9	1.7429
Colon Cancer	55	78.6	11	15.7	4	5.7	1.2714
Rectal Cancer	55	78.6	12	17.1	3	4.3	1.2571

Table (5) indicates that the mean of score was moderately significant insubstance (2-10) and low significant in substance(1-3-4-5-6-7-8-9-11-12) .

Table (6) Mean of scores for items of patients' endoscopy regarding the Complication After Endoscopy.

Complication After (G.T.I) Endoscopy	Always		Sometime		Never		MS
	f	%	f	%	f	%	
Poor Appetite	31	44.3	16	22.9	23	32.9	2.1143
Repeated Vomiting	43	61.4	14	20.0	13	18.6	2.4286
Bleeding	10	14.3	18	25.7	42	60.0	1.5429
Chest Pain	24	34.3	4	5.7	42	60.0	1.7429
Perforation	6	8.6	25	35.7	39	55.7	1.5286
Hypertension	4	6.7	22	36.7	34	56.7	1.4857
Emphysema	5	7.1	19	27.1	46	65.7	1.4143
Allergy	1	1.4	18	25.7	51	72.9	1.2857

Table (6) indicates that the mean of score was highly significant in items(1-2) and moderately significant in items (4) and low significant in items (3-5-6-7-8).

Table (7) statistical Differences between Gender, Smoking, NSAID, Number of endoscopy and Associated with Results to Digestive Endoscopy.

Categories	S.O.V	Sum of Squares	df	Mean Square	F	Sig.
Gender	Between Groups	11.048	31	.356	2.696	S.
	Within Groups	5.024	38	.132		
	Total	**16.071**	**69**			
Smoking	Between Groups	7.810	31	.252	1.159	N.S
	Within Groups	8.262	38	.217		
	Total	**16.071**	**69**			
NSAID	Between Groups	55.152	31	1.779	.776	S.
	Within Groups	87.148	38	2.293		
	Total	**142.300**	**69**			
Number of endoscopy	Between Groups	14.471	31	.467	1.570	S.
	Within Groups	11.300	38	.297		
	Total	**25.771**	**69**			

Table(7)demonstrates that there is a significant difference in gender, NSAIDs, number of endoscopy and no significant of smoking in respect to the patient's digestive endoscopy at $P < 0.05$.

Discussion

Table (1) indicates the socio-demographic characteristics of the whole study sample. The it shows that the highest percentage of age groups is between (20-29 years) and constituted (25.7%)

The explanation of this result the young age in our country face several issues like security situation and no gift of utilized there for the young age became additional nerve-racking and suffer from completely different issues like Gastro enteric issues. Mentioned that over seventieth of all ulceration cases occur in people between the ages of (25 and 64) years(7).

According to gender, the high percent was of women and constituted (64.3%). Interpret of this end result related to pregnant may reasongastro esophageal reflexes disorder,also can also related to use of contraceptive medication. Also the women additionally appear to have slower emptying of meals from the belly than men. This can also be necessary in explaining why women have a tendencyto trip nausea and bloating more regularly than men. Also supported this result when they noted that the incidence of duodenal ulcer in male to female is 2 – 3: 1 whilst in gastric ulcer are 1:1.(8)

With regard to residence, (70.0%) of patients were living in urban areas.Because the clinics place in center of governoratein this manner we obtain most of them beginning urban area. Also the results appears most the patients were married and constituted (65.7%). (24.3 %) of the sample were primary school, As regard to occupation, (41.4%) patients were housewife. Mentioned that occupation has been related to the progress of peptic ulcer (PU) (7). With relation to smoking, the majority of the subjects (64.3%) were smokers. The high percent in Ibuprofenand constituted of (42.9 %), were NSAID. Finally, in respect to the frequency of endoscopy, the majority of the sample (72.9%) were scheduled for two time.

Table (2) Mean of scores for items of patients' endoscopy regarding the organ site use of endoscopy. Table (2) indicates that the mean of score was highly significant in items(2-stomach) and moderately significant in items (3 Duodenum) and low significant in items (1- esophagus and 4-colon), Declarethe Peptic ulcer extra common happens with endoscopy and come out in 20% - 40% of people who live in industrialized countries and merely about 15%-25% of these people in fact have an ulcer (9).

Table (3) Mean of scores for items of patients' endoscopy regarding the indication of endoscopyand shows the mean of score was moderately significant in items (1-infection, 5-spasm and obstruction, 6 life style

events). Mention to the majority patients alluded for endoscopy complain of symptoms that come below the general heading of indigestion (10)

Table (4) indicates that the mean of score was highly significant in items (2-chronic constipation). Interpret of this result related to the constipation consider a big problems there for when patients suffer from this problems will try to find the main cause for this problems by endoscopy. Is disagreement with our learn and reveal that every the patients with a finding of esophageal tumor were properly referred but 10 absent of 70 patients with a diagnosis of gastric cancer, all elderly more than 50 years, had unfortunate indication for EGD (research of primitive cancer in patients by way of adenocarcinoma metastases) (11)

Table (5) about results of endoscopic and shows that the mean of score was moderately significant in items (2-gastritis and 10-gastro dudenitis) . Mention that thegrades of endoscopic analyze as oesophagitis, metaplastic epithelium in the gullet, hiatal hernia or imperfect sphincter closure, soreillness, erosive or nodular gastritis and cancer. In expansion, the worked abdomen was scored (12)

Table (6) indicates of complications of endoscopy and shows that the mean of score was highly significant in items (1-poor appetite and 2-vomiting). Account so as to complications of esophagogastroduodenoscopy (EGD) is connected by a 0.1% occurrence of complications. The largelyimortant of these complications are perforation thenhemor- rhage. Desire, Mallory-Weiss tears and former “minor” complications such since retroesophageal swelling have too beendepicted (13).

Table(7) illustrate that around is a significant difference in sexual category, NSAIDs, number of endoscopy and no significant of smoking in accept to the patient’s digestive endoscopy on $P < 0.05$. Recover that the main pathology (tumour, ulcer, or stricture) was found by endoscopy in 787/3815 (21%) patients through digestive disorder. Age, male sex, hemorrhage and anemia were found to be significant but vulnerable independent indicators of endoscopic result. A multivariate prediction regulation based on these factors had bad predictive accuracy (c statistic=0.62). Using a simplified prediction rule of age >45 years before the attendance of some “alarm” symptom, affectability was 87% and specificity was 26%. Rising or declining the age reduce bad did not significantly advance the prognostic truth (14).

Conclusion

Further than one quarter of the study test their age ranging beginning (20 – 29) years. Although height percentage in married status who had investigative and therapeutic endoscopes among too much voltage, food preparation and anxiety at home. One third of studies patient’s smoker followed over half of studies sample taking NSAIDs. The more I have done them Endoscopy they are two-off due to the early diagnosis of the sickness. The study showed elevated percentage of endoscopic finding site in stomach and duodenum.

Recommendation:

1. Promote best health practices and early nursing management optimized for the endoscopy of G.I.T disease to reduce damage and prevent complications.
2. Availability of endoscopic facilities at all hospitals in city and make it accessible to all population and thus enables earlier diagnosis of digestive tract diseases.
3. Expansion of the service with endoscopic, more relevant accessories and diagnosis and facilitate therapeutic measures.

Ethical Clearance: The Research Ethical Committee at scientific research by ethical approval of both environmental and health and higher education and scientific research ministries in Indonesia.

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