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RESEARCH ARTICLE

A STUDY TO ASSESS THE LEVEL OF ANXIETY AMONG CLIENTS UNDERGOING UPPER GASTRO ENDOSCOPY AT INDIRA GANDHI GOVT. GENERAL HOSPITAL & POST GRADUATE INSTITUTE , PUDUCHERRY

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Abstract

Anxiety is a common problem in patients undergoing invasive medical procedures. Endoscopy is a demanding procedure and requires a patient's good cooperation for successful results. Quantitative research approach with descriptive research design was adopted to achieve the aim of the present study. The study was carried out at IGGGH & PGI, Puducherry, to assess the level of anxiety among clients undergoing upper gastro endoscopy. The demographic data was collected from the clients who fulfill the inclusion criteria. The level of anxiety was assessed by Strait Trait Anxiety Inventory – Y- 1 (STAI-Y-1) scale. The conceptual frame work of the study was based on Imogene king's proposed goal attainment model (1971) of nursing. 30 Samples were selected by Simple random technique by using lottery method. The study findings revealed that, Majority (33.3 %) of the clients were belongs to the age group of 31 – 40 years, among that most of them were male and graduates, 93 % were residing in urban , 50 % earns between Rs.10, 001 – Rs. 15, 000.Greater part (40 %) of the clients came for endoscopy with other gastro intestinal symptoms and 55 % of the client heard through family members and 45 % obtained the information through friends. According to the level of anxiety, majority (93%) of them shows severe anxiety and 7 % shows moderate level of anxiety. There was no statistically significant association between the level of anxiety with the selected demographic variables such as age, gender and educational status, residence, income and reason for endoscopy.It concludes, majority (93%) of them shows severe anxiety and 7 % shows moderate level of anxiety towards the procedure. Hence, it concluded that most of the clients were severely anxious about the procedure

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Introduction:-

The word "Endoscopy" is derived from the Greek word Endo (means inside) and "spoke in" (means to examine). Endoscopy means direct visualization of the interior aspects of the gastro intestinal tract starting from pharynx to duodenum through mouth by means of an endoscopy. Endoscopy contains multiple channels that allow for air insufflations, irrigation, fluid aspiration and the passage of special instrument .These instruments include biopsy forceps, cytology brushes; needles wire baskets, laser probes and electro cautery shares.

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Upper gastrointestinal endoscopy is a widely used procedure for diagnosis and treatment of upper gastrointestinal diseases. Although it is considered as a safe and well-tolerated procedure, significant discomfort has been noted in patients undergoing endoscopy without sedation. (Aduful, 2007)

Gastro intestinal Cancer is one of the leading causes of adult deaths worldwide. In south India, Stomach cancer is the third most common cancer. So the technology goes throughout our life. But still we are lack in early and effective diagnosis. People were scared by seeing the huge apparatus used for diagnosis and hesitate to come forward. Endoscopy has become a mandatory investigation in Gastroenterology is early detection of GI Cancers, which is a major health problem in our country (Kathiravan, 2011).

Anxiety is an emotional response to a threatening situation and it is generally agreed that hospitalization and associated procedures produce various threats including possible disability, coping with new social situations, and deprivation of normal freedom results in alteration in the physiological parameters (Auden, 2010)

Upper gastrointestinal endoscopy can be an uncomfortable, unpleasant and painful procedure. Patient acceptability of endoscopic procedures may be reduced due to fears of embarrassment, discomfort, and worry which in turn reflect disturbances in physiological response.

Adequate information about endoscopic procedures may reduce anxiety; fear and worrying that may lead to good co-operation and active willing to undergo the procedure. So as a nurse and health care personnel it is our role to explain the procedure to the patient , there by reduces pre-procedural anxiety there by maintains stable physiological response and gain co-operation which will adversely helpful in early diagnosis and for effective treatment.

Need For The Study:-

Upper GI endoscopy in combination with biopsy through endoscopy plays an important role in the early diagnosis of GI disorders and provides an opportunity for a broad range of treatment options and cure.

Anxiety is a common problem in patients undergoing invasive medical procedures. Endoscopy is a demanding procedure and requires a patient's good cooperation for successful results. Anxiety before upper gastrointestinal endoscopy may have adverse consequences and can sometimes hamper successful completion of the procedure (Mahmut Arabul , 2013)

A person's cognitive processes can alter the perceived meaning of a threatening stimulus and reduce the physiological response. The best way to reduce the anxiety of the patient is to educate about the procedure and provide psychological support during the procedure stated by Roshan John (2012), in Cognitive theory of Emotion.

Abdominal pain and gastro esophageal reflux was the most common GI symptom at USA. There were 6.9 million underwent upper endoscopy, 11.5 million lower endoscopy, and 228,000 billiary endoscopies performed in 2009. The total cost for outpatient GI endoscopy examinations was \$32.4 billion. It concludes, GI diseases are the source of substantial morbidity, mortality, and cost in the United States. (Peery , 2012)

In India, 60% - 70 % of people were suffering from digestive disorders and cause significant mortality. Narrated 50% of the rural populations are unaware of the diagnostic procedure and not willing to come forward because of anxiety. Education of the patient prior to the procedure about the things they will see, feel and hear during the procedure has a significant role in reducing anxiety and fear. (Pignone, 2012)

In Tamilnadu, around 50-60 % of people suffering from digestive disorders. Esophageal and stomach cancers are the third and fourth most common cancers in our country. Early detection and treatment reduces morbidity and mortality. The latest fibrotic endoscopes allow us to obtain targeted biopsies and other therapeutic procedures effectively. (Dr. George Chandy, MIOT Hospital, Chennai,)

In Puducherry, more than 60 to 70 % of patients suffered from alcohol-related gastroenterological disorders and has carried out 500 endoscopy procedures in the last few months at Pondicherry Institute of Medical Sciences. Awareness should be created through the media regarding benefits of early detection with endoscopy. (Thomas Alexander, Hindu, 2010)

A study on Mucosal Biopsies through upper gastro endoscopy among 192 cases at sri venkateshwaraa medical college hospital and research centre, pondicherry . It reveals that upper GI endoscopy helps in early detection of mucosal lesions and diagnosis of the carcinomas at early stage leading to early clinical management. (Sandhya Panjeta Gulia , 2012)

During the clinical experience the Investigator has observed that many patients scheduled for upper gastrointestinal endoscopy are having anxiety, as a consequence of the procedure has to be repeated, or the patient experiences more discomfort during the procedure.. Hence the investigator felt that pre-procedural teaching will reduce anxiety level and increase self-confidence and co-operation to the procedure. So, the researcher selected this topic in order to create awareness and make the people to lead the life happily by early detection of GI disorder through upper gastro endoscopy.

Statement of the problem:

A study to assess the level of anxiety among clients undergoing upper gastro endoscopy at IGGGH & PGI , Puducherry.

Objectives:-

1. To assess the level of anxiety among clients undergoing upper gastro endoscopy.
2. To associate the level of anxiety with selected demographic variables.

Review Of Literature:

Review of literature is a key step in research process. It is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic.

A literature review is a written summary of the state of existing knowledge on the research problem. The task of reviewing research literature involves the identification, selection, critical analysis and written description of the existing information on a topic. (Polit and Hungler, 2004)

An Existing review of literature to gain insight into the selected problem is depicted under the following sequences

Sec A : Literature related to magnitude of upper gastro endoscopy

Sec B : Literature related to Upper gastro endoscopy on anxiety level

Research Methodology:-**Research approach:**

Quantitative research approach

Research design:

In the present study the descriptive research design was adopted.

Setting of The Study:

The study was conducted at IGGGH & PGI, Puducherry.

Population of the study:

The population for the present study was the Clients planned to undergoing upper gastro endoscopic procedure at IGGGH & PGI, Puducherry.

Variables:

Dependent variable- Level of Anxiety

Sample:

Sample for the present study were the clients planned to undergoing upper gastro endoscopic procedure and who fulfils the inclusion criteria.

Sample size:

30 study participants were selected for the study.

Sampling technique:

Simple random sampling technique was adopted by using lottery method.

Criteria for selection of sample**Inclusion criteria:**

1. Patient those who are posted for endoscopy procedure.
2. Patient those who can understand and speak Tamil.
3. Patient who are willing to participate in the study
4. Patient available at the time of data collection.
5. Patient age above 20 and below 61 years.

Exclusion criteria:

1. Patient who are associated with systemic complications like coronary heart
2. disease, epilepsy etc.,
3. Mentally ill patient.
4. Previous experience of endoscopy

Methods of data collection:-

Data collection was carried out within the given period of 1 weeks at IGGGH & PGI, puducherry. Self introduction and information about the study was explained to the participants , so as to get co-operation in the procedure of data collection. Data will be collected in two phases,

First phase:

Demographic data was collected from the client

Second phase:

Level of anxiety was assessed by STAI – Y- 1 scale before the procedure.

Organisation And Presentation Of Data:

The analysis of data was organized and presented under the following sections.

Section A: Distribution of the clients undergoing upper gastro endoscopy according to their demographic variables

Section B: Distribution of the level of anxiety among the clients undergoing upper gastro endoscopy .

Section C: Association between the level of anxiety with selected demographic variables. **Section A**

Distribution Of The Clients Undergoing Upper Gastro Endoscopy According To Their Demographic Variables:

Table 4.1.1:- Distribution of the client to their age, gender and educational status. N=30

DEMOGRAPHIC VARIABLES		
	f	%
AGE		
21-30 years	19	63.3
31-40 years	11	36.7
41-50 years	-	-
51-60 years	-	-
GENDER		
Male	14	46.7
Female	16	53.3
EDUCATIONAL STATUS		

Primary	27	90
Secondary	1	3.3
Graduates	2	6.7
Post graduates	-	-

Table 4.1.1 shows the distribution of the client to their age, gender and educational status. It depicts that majority (33.3 %) of the clients were belongs to the age group of 31 – 40 years, among that most of them were male and graduates.

Table 4.1.2:-Distribution of the clients according to the residence area .

Residence	f	%
Rural	21	70
Urban	9	30

Residence:-

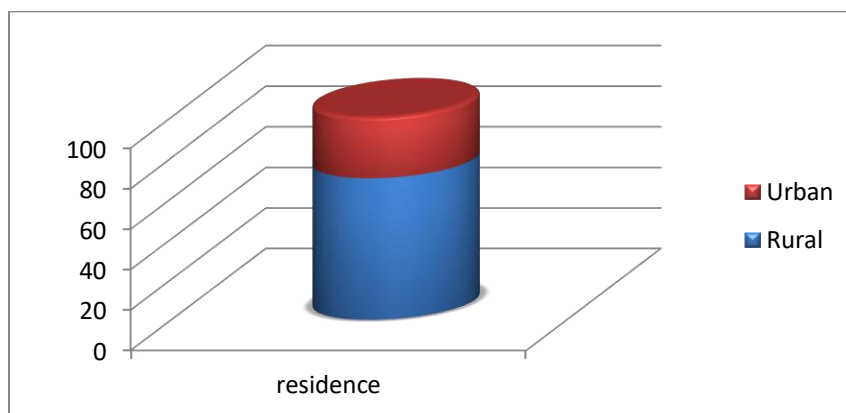


Fig. 4.1.2:-Illustrates the distribution of the clients according to the residence area. It reveals that, majority (93 %) were residing in urban and only 7 % of the client were residing at rural.

Table 4.1.3:-Distribution of the clients according to the Monthly Income.

Total Family Income	f	%
Less than Rs.5000	-	-
Rs.5001-10,000	5	16.7
Rs.10,001- 15,000	6	20
More than 15.000	19	63.3

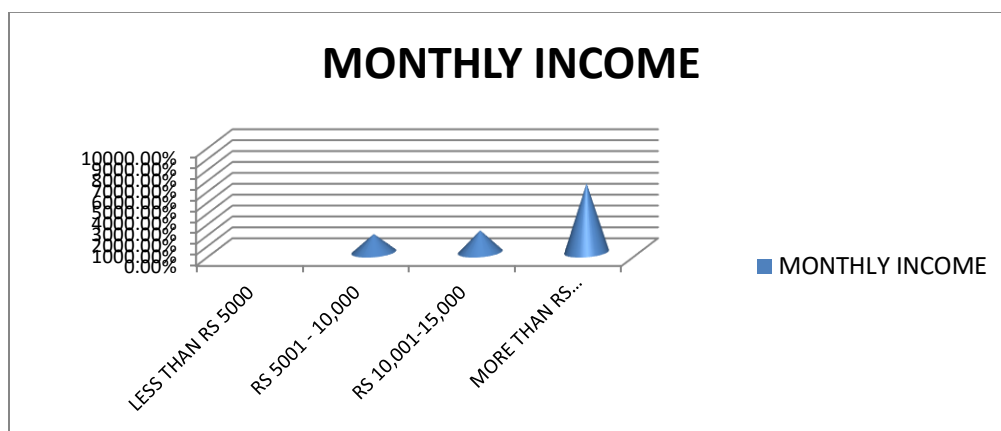
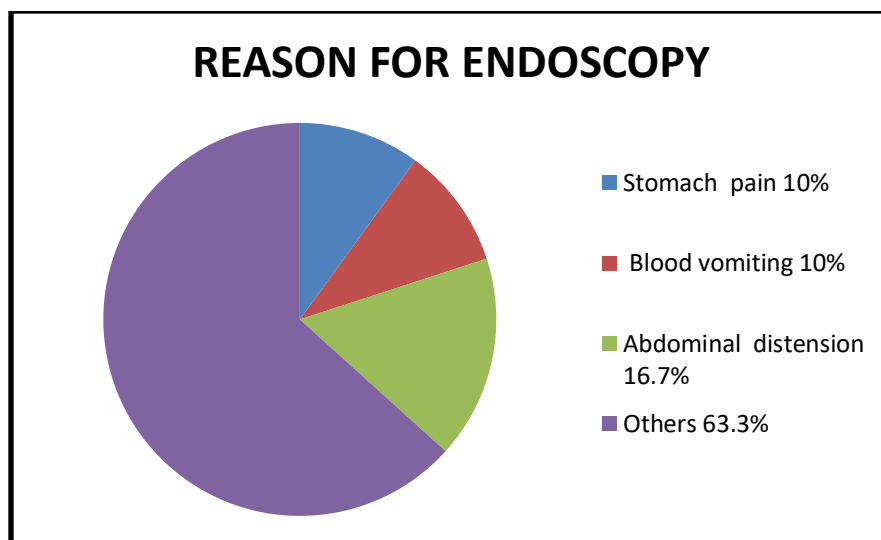


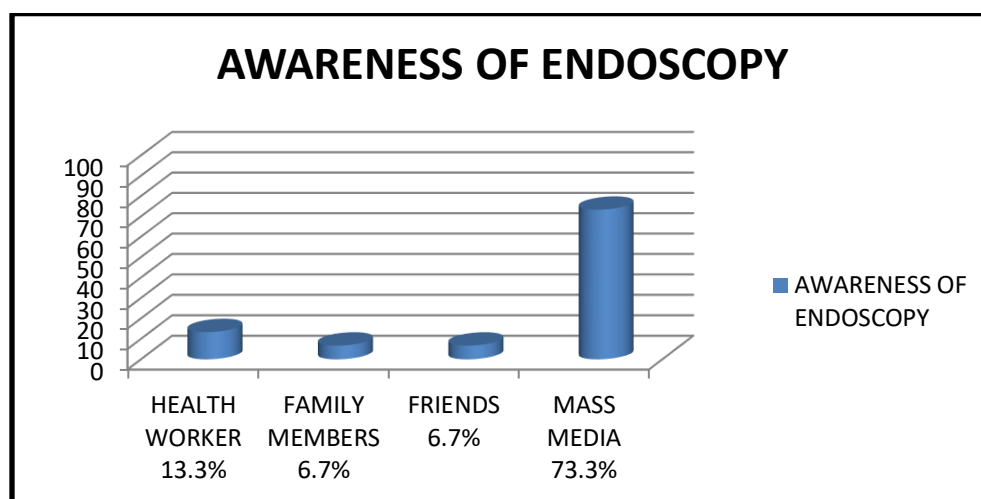
Fig. 4.1.3:- Shows distribution of the clients according to the monthly income. It depicts that majority (50 %) of the client earns between Rs.10, 001 – Rs. 15, 000 and 33 % earns more than 15,000 and 17 % earns between Rs. 5001- 10, 000.

Table 4.1.4:-Distribution of the clients according to the disease related variables

Reason For Endoscopy	f	%
Stomach pain	3	10
Blood vomiting	3	10
Abdominal distension	5	16.7
Others	19	63.3

**Fig. 4.1.4 :-**Reveals that, majority (40 %) of the clients came for endoscopy with other gastro intestinal symptoms and 39 % were came with complaints of stomach pain and 21 % of the client came with abdominal distension.**Table 4.1.5:-**Distribution of the clients according to the awareness to the procedure .

AWARENESS	f	%
Health worker	4	13.3
Family members	2	6.7
Friends	2	6.7
Mass Media	22	73.3

**Fig. 4.1.5:-**Depicts that, 86 % of the clients were aware about the procedure, among them 55 % heard through family members and 45 % through friends. It concludes that majority of the clients were received the information through family members and from friends.

Section B/ Objective. 1:

To assess the level of anxiety among clients undergoing upper gastro endoscopy.

Table 4. 2. 1:-Distribution of the level of anxiety for the client undergoing upper gastro endoscopy . (N=30)

LEVEL OF ANXIETY	f	%
No anxiety (0-20)	0	-
Mild anxiety (21-40)	0	-
Moderate anxiety (41-60)	28	93
Severe anxiety (61-80)	2	7

Table 4. 2. 1 shows the level of anxiety regarding upper gastro endoscopy clients. It reveals that majority (93%) of them shows moderate anxiety and 7 % shows severe level of anxiety.

Section C/ Objective. 2:

To associate the level of anxiety with selected demographic variables.

Table 4.3.1:-Distribution of the level of anxiety with selected demographic variables (N = 30)

DEMOGRAPHIC VARIABLES	PRE-TEST				
	MILD	MODERATE	CHI SQUARE	P-VALUE	LEVEL OF SIGNIFICANCE
AGE					
21-30 YEARS	8	11	1.36	0.5055	(N.S)
31-40 YEARS	5	6			
41-50 YEARS	0	0			
51-60 YEARS	0	0			
GENDER					
MALE	8	6	0.535	0.4642	(N.S)
FEMALE	7	9			
EDUCATIONAL STATUS					
PRIMARY	19	8	1.212	0.545	(N.S)
SECONDARY	1	0			
GRADUATE	2	0			
POSTGRADUATE	0	0			

(P < 0.05 Significant , * * Highly significant, N.S= No Significant)

Table.4.3.1: Shows that there was no statistically significant association between the level of anxiety and the selected demographic variables of age, gender and educational status.

Table 4.3.2:-Distribution of the level of anxiety with selected demographic variables of residence , income and reason for endoscopy n = 30

DEMOGRAPHIC VARIABLES	PRE – TEST				
	MILD ANXIETY	MODERATE ANXIETY	CHI SQUARE	P-VALUE	LEVEL OF SIGNIFICANTS
RESIDENCE					
RURAL	3	18	5.48	0.119	(N.S)
URBAN	5	4			
INCOME					
5000 AND LESS	0	0	0.78	0.6739	(N.S)
5001-10000	3	2			
10001-15000	4	2			
MAORE THAN 15000	9	10			
REASON FOR ENDOSCOPY					
STOMACH PAIN	0	3	4.705	0.1947	(N.S)
BLOOD VOMITING	0	3			

ABDOMINAL DISTENSION	3	2			
OTHERS	7	12			

(P < 0.05 Significant , * * Highly significant, N.S= No Significant)

Table.4.3.2: Shows that there was no statistically significant association between the level of anxiety and the selected demographic variables of residence, income and reason for endoscopy.

Table 4.3.3:-Distribution of the level of anxiety with selected demographic variables source of information about endoscopy procedure.n = 30

DEMOGRAPHIC VARIABLES	MILD	MODERATE	CHI SQUARE	P-VALUE	LEVEL OF SIGN-FICANTS
SOURCE OF INFORMATION					
HEALTH PROFESSIONALS	2	2			
FAMILY MEMBERS	2	0	2.182	0.535	(N.S)
FRIENDS	1	1			
MASS MEDIA	10	12			

(P < 0.05 Significant , * * Highly significant, N.S= No Significant)

Table.4.3.3: Shows that there was no statistically significant association between the level of anxiety with the selected demographic variables .

Major findings of the study:-

1. Majority (33.3 %) of the clients were belongs to the age group of 31 – 40 years, among that most of them were male and graduates.
2. According to the residence area., majority (93 %) were residing in urban and only 7 % of the client were residing at rural.
3. Majority (50 %) of the client earns between Rs.10, 001 – Rs. 15, 000.
4. Most (76 %) of the clients were alcoholic and with regards to the duration, greater part of the clients (56%) were consuming alcohol for 1-5 years.
5. Greater part (40 %) of the clients came for endoscopy with other gastro intestinal symptoms and 86 % of the clients were aware about the procedure, among them 55 % heard through family members and 45 % through friends.
6. According to the level of anxiety, majority (93%) of them shows moderate anxiety and 7 % shows severe anxiety towards the procedure..
7. There was no statistically significant association between the level of anxiety and the selected demographic variables of age, gender and educational status, residence, income and reason for endoscopy.

Discussion:-

This chapter attempts to discuss the finding of the study as per the objectives. The findings were discussed under the following headings.

1. Assessment of the level of anxiety among clients undergoing upper gastro endoscopy.
2. Associate the level of anxiety with selected demographic variables.

Objective 1:

Assessment of the level of anxiety among clients undergoing upper gastro endoscopy:

Anxiety is considered as one of the basic feelings in human. All of us experience anxiety in dangerous situations. High anxiety levels before medical or surgical interventions can lead to some undesirable results. So information before medical and surgical procedures helps to reduce the situational anxiety there by gains co-operation during the procedure and lessen the procedure duration.

The study finding reveals, majority (93%) of them shows moderate anxiety and 7 % shows severe level of anxiety towards the procedure. Hence, it concluded that most of the clients were severely anxious about the procedure .

The study findings were consistent with Mahmut arabul, August 2013 conducted a prospective study to assess the impact of information before unsedated upper gastrointestinal endoscopy on patient satisfaction and anxiety among four hundred and forty patients. The result reveals there was a significant difference in the patient watched (p =

0.003). It concludes that information about the procedure helps to reduce the anxiety of the patient and increases patient satisfaction.

Objective 2:

Associate the level of anxiety with selected demographic variables:

Anxiety is a common problem in patients who have to undergo an invasive medical procedure. The increase in anxiety, stress, and decrease in tolerance, lead to unexpected changes in physiological status.

The study findings reveals that there was no statistically significant association between the level of anxiety and the selected demographic variables of age, gender and educational status, residence, income and reason for endoscopy.

The study findings supported with Julina Ongkasuwan, (2012) conducted a prospective case control study on physiologic impact of endoscopy at Baylor college of medicine, USA. The Result shows that, there was no statistically significant increase in HR, change in O₂ sat, blood pressure with selected demographic variables. It concludes that diagnostic endoscopy have no impact on physiologic parameters.

Conclusion:-

These findings of the study have been discussed in terms of the objectives and theoretical base. The following conclusion was drawn from the findings of the study: Majority (93%) of the clients shows severe anxiety to the procedure.

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