



Research Paper

"A Study To Assess The Prevalence And Risk Factors Of Gastro Esophageal Reflux Disease Among Adults In Selected Area Of Community, In Puducherry."

Ms. K. Jasmine¹, Mrs. G. Sathyavathy², DR. G. Muthamilselvi³

¹UG Student, Sri Manakula Vinayagar Nursing College, Puducherry – 605 107

²Associate Professor, Department of Medical Surgical Nursing, SMVNC, Puducherry – 605 107

³Principal, Sri Manakula Vinayagar Nursing College, Puducherry – 605 107 Corresponding Author: Mrs. G. Sathyavathy - Mail Id: sathyavathyg@smvnc.ac.in

ABSTRACT

Gastroesophageal reflux disease (GERD) is one of the most common gastrointestinal disorders. Some degree of retrograde flow of stomach contents to the esophagus is physiologic. Gastro esophageal reflux disease (GERD) develops when these retrograde flows that has substantial health and economic consequences. condition caused by abnormal reflux of gastric contents into the esophagus.

GERD is caused by frequent acid reflux. When you swallow, a circular band of muscle around the bottom of your esophagus (lower esophageal sphincter) relaxes to allow food and liquid to flow into your stomach. Then the sphincter closes again. If the sphincter relaxes abnormally or weakens, stomach acid can flow back up into your esophagus. This constant backwash of acid irritates the lining of your esophagus, often causing it to become inflamed. The pathogenesis of gastro esophageal reflux disease (GERD) is complex and involves changes in reflux exposure, epithelial resistance, and visceral sensitivity. The gastric refluxate is a noxious material that injures the esophagus and elicits symptoms.

Key words: GERD, esophagus, stomach acid.

I. INTRODUCTION:

Gastroesophageal reflux disease (GERD) is one of the most common gastrointestinal disorders. Some degree of retrograde flow of stomach contents to the esophagus is physiologic. Gastro esophageal reflux disease (GERD) develops when these retrograde flows that has substantial health and economic consequences. condition caused by abnormal reflux of gastric contents into the esophagus. GERD is caused by frequent acid reflux. When you swallow, a circular band of muscle around the bottom of your esophagus (lower esophageal sphincter) relaxes to allow food and liquid to flow into your stomach. Then the sphincter closes again. If the sphincter relaxes abnormally or weakens, stomach acid can flow back up into your esophagus. This constant backwash of acid irritates the lining of your esophagus, often causing it to become inflamed. The pathogenesis of gastro esophageal reflux disease (GERD) is complex and involves changes in reflux exposure, epithelial resistance, and visceral sensitivity. The gastric refluxate is a noxious material that injures the esophagus and elicits symptoms.

Patients may also have non-burning chest pain and difficulty swallowing. The chest pain is usually located in the middle of the chest and may radiate through to the back. Difficulty swallowing (dysphagia) may be due to abnormal esophageal motility or to an esophageal stricture. Symptoms may also arise from the throat, larynx, or lungs

The approach to testing depends on the clinical question under consideration. In Barium

Studies A barium esophagram is an x-ray study in which the structure and function of the esophagus is evaluated. This study is usually the first test used in patients with dysphagia. It is excellent for the diagnosis of a stricture or other causes of obstruction. The barium esophagram also permits the evaluation of coordination of esophageal motorfunction. However, it is a poor test for documenting esophagitis, and reflux is detected in only 40% of patients with typical reflux symptoms. Further, some reflux may be seen in non-refluxers. Minor episodes of reflux should therefore be considered an indication.

Medical Therapy includes lifestyle Changes Medical treatment of GERD usually begins with dietary and life-

style modifications. Smoking affects esophageal motor function and increases air swallowing which results in frequent belching often unrecognized due to the need to vent the distended stomach. Because the anti-reflux barrier is usually weak in patients with GERD, gravity is important in keeping gastric contents in the stomach and returning regurgitated material back to the stomach when reflux does occur. Therefore, avoiding lying down after eating and elevating the head of the bed are usually recommended elements of reflux therapy. For unknown reasons, reflux symptoms often increase with weight gain and decrease with weight loss.

Aim of the study

The aim of the study was to assess the prevalence and risk factors of Gastro esophageal reflux among adults.

Objectives Of study

- i) To assess the prevalence and risk factors of Gastro Esophageal Reflux Disease among adults in selected area of community.
- ii) To associate prevalence and risk factors of Gastro Esophageal Reflux Disease in selected area of community.
- iii) To evaluate the prevalence and risk factors of Gastro Esophageal Reflux disease among adults in selected area of community.

II. METHODOLOGY:

The research approach used for this disease study was quantitative research approach .A descriptive research design was used to assess the prevalence and risk factors of gastroesophageal among adults in selected area of community, puducherry.

By using simple random sampling technique.50 samples was selected for the present study.The period of data collection was two week .The tool consists of demographic data.

TOOL DESCRIPTION

Section - A: Socio demographic Variables: Age, gender, Religion, educational Status,residency, marital Status, occupation, income, diet pattern, previous knowledge about GERD, history of GERD , source of information.

Table1:-Frequency and percentage wise distribution of demographic variables among adults in selected area of community. (N=50)

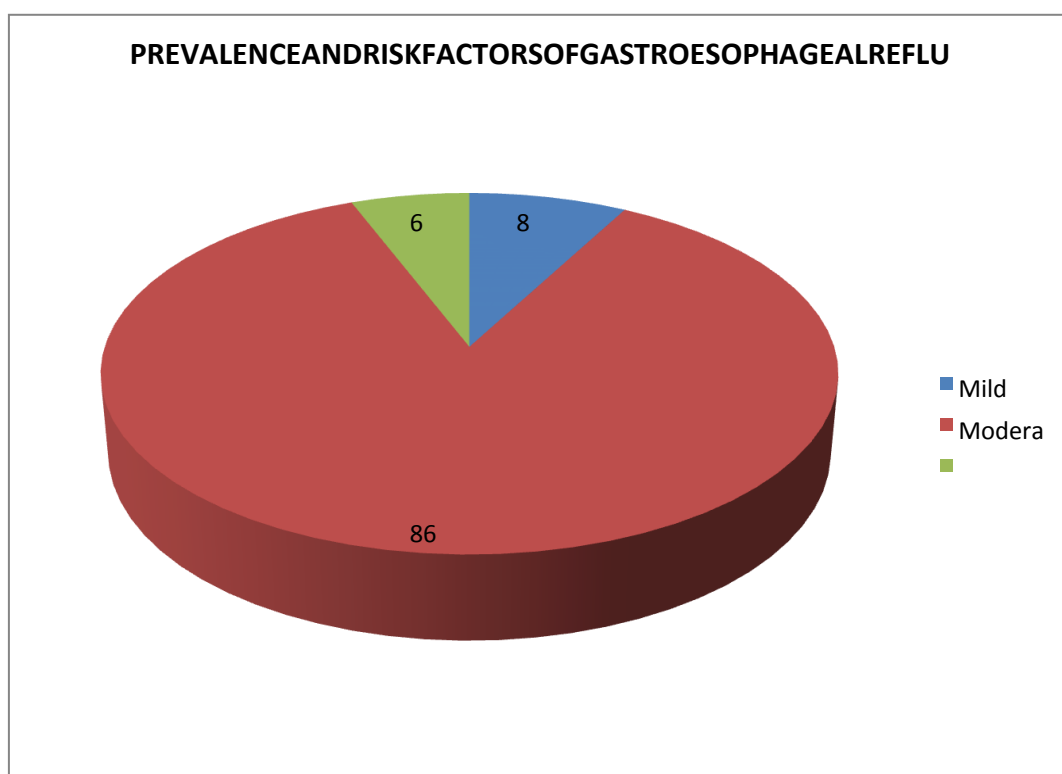
SL. NO	DEMOGRAPHIC VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
1	Age(inyears)		
	a)15to25years	5	10
	b)26to35years	11	22
	c)36to45years	22	44
	d)Above45years	12	24
2	Gender		
	a)Male	22	44
	b)Female	28	56
	c)Transgender	0	0
3	Religion		
	a)Hindu	42	84
	b)Muslim	8	16
	c)Christian	0	0
	d)others	0	0
4	Educationalstatus		
	a)Illiterate	12	24
	b)Primaryeducation	18	36
	c)Secondaryeducation	15	30

	d)Degreeand above	5	10
5	Residency		
	a)Urban	50	100
	b)Rural	0	0
6	Maritalstatus		
	a)Married	45	90
	b)Unmarried	5	10
	c)Widow	0	0
	d)Separated	0	0
7	Occupation		
	a)Business	3	6
	b)Dailywages	19	38
	c)Unemployed	16	32
	d)Salaried	12	24
8	Income		
	a)<Rs.5000	3	6
	b)Rs5001to 10000	27	54
	c)Rs10001 to 15000	16	32
	d)Rs 15001and above	4	8
9	Dietpattern		
	a)Vegetarian	5	10
	b)Nonvegetarian.	45	90
10	PreviousknowledgeaboutinGERD?		
	a)Yes	35	70
	b)No	15	30
11	Isthereanyhistoryof GERDin family?		
	a)Yes	6	12
	b)No	44	88
12	SourceofinformationregardingGERD		
	a)Teachers	2	4
	b)Massmedia	10	20
	c)Healthcareproviders	20	40
	d)Others.	18	36

Table 2:-Frequency and percentage wise distribution of the prevalence and risk factors ofGastro Esophageal Reflux Disease among adults in selected area of community.

(N = 50)

PREVALENCE AND RISK FACTORS OFGASTROESOPHAGEALREFLUXDISEASE	FREQUENCY	
	(n)	PERCENTAGE(%)
Mild	4	8
Moderate	43	86
Severe	3	6
Total	50	100
Mean±Standardddeviation	12.42±2.572	



Section - B: checklist (structured questionnaire) regarding prevalence and risk factors of gastroesophageal reflux disease among adults in selected area of community, in Puducherry

SCORING INTERPRETATION:

Low level	1-10
Moderate Level	10-20
High Level	20-30

Table -3: Association between the prevalence and risk factors of Gastro Esophageal Reflux Disease among adults at selected area of community with demographic variables. (N=50)

SL. NO	DEMOGRAPHIC VARIABLES	PREVALENCE AND RISK FACTORS OF GASTROESOPHAGEAL REFLUX DISEASE						Chi-square X^2 and P-Value
		Mild		Moderate		Severe		
		N	%	N	%	N	%	
1	Age (in years)							$X^2=20.69$ Df=6 p=0.002 *S
	15 to 25 years	0	0	3	7	2	66.7	
	26 to 35 years	3	75	7	16.3	1	33.3	
	36 to 45 years	0	0	22	51.2	0	0	
	Above 45 years	1	25	11	25.6	0	0	
2	Gender							$X^2=2.52$ Df=2 p=0.283 NS
	Male	2	50	20	46.5	0	0	
	Female	2	50	23	53.5	3	100	
	Transgender	0	0	0	0	0	0	
3	Religion							

"A Study To Assess The Prevalence And Risk Factors Of GastroEsophageal Reflux Disease ..

	Hindu	3	75	37	86	2	66.7	X ² =1.046Df=2 p=0.593NS
	Muslim	1	25	6	14	1	33.3	
	Christian	0	0	0	0	0	0	
	Others	0	0	0	0	0	0	
4	Educationalstatus							X ² =4.644Df=6 p=0.590NS
	Illiterate	2	50	9	20.9	1	33.3	
	Primaryeducation	1	25	16	37.2	1	33.3	
	Secondaryeducation	1	25	14	32.6	0	0	
	Degreeandabove	0	0	4	9.3	1	33.3	
5	Residency							CONSTANT
	Urban	4	100	43	100	3	100	
	Rural	0	0	0	0	0	0	
6	Maritalstatus							X ² =11.58Df=2 p=0.003 *S
	Married	4	100	40	93	1	33.3	
	Unmarried	0	0	3	7	2	66.7	
	Widow	0	0	0	0	0	0	
	Separated	0	0	0	0	0	0	
7	Occupation							X ² =12.30Df=6 p=0.046 *S
	Business	1	25	1	2.3	1	33.3	
	Dailywages	1	25	18	41.9	0	0	
	Unemployed	2	50	12	27.9	2	66.7	
	Salaried	0	0	12	27.9	0	0	
8	Income							X ² =6.37Df=6 p=0.383NS
	<Rs.5000	0	0	2	4.7	1	33.3	
	Rs 5001to 10000	3	75	22	51.2	2	66.7	
	Rs 10001to 15000	1	25	15	34.9	0	0	
	Rs15001 andabove	0	0	4	9.3	0	0	
9	Dietpattern							X ² =2.77Df=6 p=0.837NS
	Vegetarian	0	0	4	9.3	1	33.3	
	Nonvegetarian.	4	100	39	90.7	2	66.7	
10	PreviousknowledgeaboutinGERD							X ² =0.065Df=2 p=0.968NS
	Yes	3	75	30	69.8	2	66.7	
	No	1	25	13	30.2	1	33.3	
11	Isthereanyhistoryof GERDin family							X ² =1.844Df=2 p=0.398NS
	Yes	0	0	5	11.6	1	33.3	
	No	4	100	38	88.4	2	66.7	
12	SourceofinformationregardingGERD							X ² =9.65Df=6 p=0.140NS
	Teachers	0	0	1	2.3	1	33.3	
	Massmedia	1	25	9	20.9	0	0	
	Healthcareproviders	1	25	17	39.5	2	66.7	
	Others	2	50	16	37.2	0	0	

*-p< 0.05significant, NS-Non significant

III. RESULT:

The major findings of the study were;

- It shows frequency and percentage wise distribution of the prevalence and risk factors of Gastro Esophageal Reflux Disease among adults in selected area of community. Majority of the adults 43(86%) had moderate, 4(8%) had mild and 3(6%) had severe of the prevalence and risk factors of Gastro Esophageal Reflux Disease among adults in selected area of community and the mean and standard deviation of the prevalence and risk factors of Gastro Esophageal Reflux Disease among adults in selected area of community is (12.42±2.572) respectively.
- It depicts that in the evident of chi-square of the demographic variable Age (in years), marital status and Occupation had shown statistically significant association between the prevalence and risk factors of Gastro Esophageal Reflux Disease among adults at selected area of community with demographic variables. The other demographic variable had not shown statistically significant association the prevalence and risk factors of Gastro Esophageal Reflux Disease among adults at selected area of community with demographic variables respectively.

IV. RECOMMENDATIONS:

- Similar Study can be conducted in other parts of the country with a large a samples.
- The same study can be conducted in different settings
- The same study can be replicated with larger samples for better generalization
- The study can be done as a longitudinal study
- The study can be implemented at the various states of India

V. CONCLUSION:

A study to assess the prevalence and risk factors of Gastro Esophageal Reflux Disease among adults in selected area of community, in Puducherry. The findings of the study revealed that Out of 50 samples, The Majority of Adults 43(86%) had moderate, 4(8%), had mild and 3(6%) had severe of the prevalence and risk factors Gastro Esophageal Reflux Disease among adults in selected area of community.

REFERENCES:

- [1]. BasavanthappaBT .Nursing Research, New Delhi; Jaypee BrothersMedical Publishers P ltd.
- [2]. BrunnerandSuddarth,ITextbookofMedicalSurgical-,12theditionwolterskluwerspvtltd, New Delhi.
- [3]. Lewis,Colier,Hettkemper,Dirksen.MedicalSurgicalNursing.6thedMosbyPublication.
- [4]. JoyceMBlackEstherMataserinJacob.MedicalSurgicalNursing.ClinicalManagementforCon tinuityof care. 5thed. New Delhi: HarcourtBraceandcompany.
- [5]. SureshKSharma,NursingResearchandStatistics,PublishedbyElsevier,ADivisionOfReedEls evierIndiaPrivateLimited.
- [6]. Abdellah,G.Faye,EugeneLevene,BetterPatientCareThroughNursingResearchLondon:The
- [7]. MacMillion PublishingCompany.
- [8]. AmericanHolisticNursesAssociation.PositionontheroleofNursesinthePracticeofCompleme ntaryand AlternativeTherapies.
- [9]. KothariCR,Researchmethodology-methodsand techniques.2ndeditionNew.
- [10]. BurnsNancy,GrovekSusaneThePracticeofNursingResearch-Conduct,CritiqueandUtilization,2nded.Philadelphia(us);WBSaundersCompany.
- [11]. LuckmannandSorensens.MedicalSurgicalNursing.4thed.Philadelphia:W.BSoundersComp any;1997.
- [12]. BlackJM,HawksJH.Medical- Surgical Nursing: Clinical Managementfor Positive Outcomes. Vol 2: 8th ed. Philadelphia:ElsevierPublications; 2009.
- [13]. PolitFD,BeckCT.NursingResearch:GeneratingandAssessingEvidenceforNursingPractice. 8thed.Philadelphia:Lippincott,WilliamsandWilkinsPublications;2004.
- [14]. Lippincott(1998)ManualofNursingPractices8thedition,Ed.Lippincott,Williams&Wilkins, publications, US.
- [15]. Marlow,Textbookofpaediatricnursing,6thedition2006,saurabhprintedpvt.Ltd,Nodia
- [16]. Wong's,Essentialsfopaediatricnursing,8thedition,2009,Elsevier,firstfloor,Nodia.
- [17]. Parulduitta, A textbook of paediatric nursing, 2nd edition 2009, jaypee brothers medicalPublications,Pvt.Ltd, New Delhi.
- [18]. Simpson WG. Gastroesophageal reflux disease. Diagnosis and management. Arch InternMed1995; 155:798.
- [19]. Naik RD, Vaezi MF. Extra-esophageal gastroesophageal reflux disease: understandingthisinterplay. Expert Rev GastroenterolHepatol2015; 9:969.
- [20]. Nordenstedt H, Nilsson M, Johansson S, et al. The relation between gastroesophagealreflux and respiratory symptoms in a population-based study: the Nord-Trondelag healthsurvey.2006; 129:1051.
- [21]. Hassall E. Outcomes of fundoplication: causes for concern, newer options. ArchDisChild.2005;90:1047–1052.
- [22]. Paoletti G, Melone G, Ferri S, et al. Gastroesophageal reflux: when, how, and why.CurrOpinAllergyClinImmunol 2021; 21:52.

- [23]. KatzPO, GersonLB, VelaMF. Guidelines for the diagnosis and management of gastroesophageal reflux disease. *Am J Gastroenterol* 2013; 108:308.
- [24]. Kiljander TO, Laitinen JO. The prevalence of gastroesophageal reflux disease in adults 2004; 126:1490.
- [25]. Field SK, Underwood M, Brant R, Cowie RL. Prevalence of gastroesophageal reflux disease. 1996; 109:316.