

A Descriptive Study on the Association between Stress Level and Gunmam (Peptic Ulcer Disease)

Dr. R. Priyadharshini^{1*} Dr.K.Rohini^{2*} and Dr. T. Komalavalli, MD(S) Ph.D³

^{*1}PG scholar,^{*2}PG Scholar,³Head Of The Department, Pothu Maruthuvam, Government Siddha Medical College & Hospital Palayamkottai, Tirunelveli

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ABSTRACT:

Peptic ulcer disease is one of the most prevalent conditions and has a significant effect on mental health. To study the association of stress level and gunmam (peptic ulcer disease) patients. To assess the etiological factors from the siddha perspective.

METHODS: The study involves 40 peptic ulcer patients who attending opd at gsmcpalayamkottai.it employs a four months (AUGUST TO NOVEMBER 2023) cross sectional study ,to assess the stress level using standardized questionnaire and demographic data which include life style concerns. The sample size 40 (male 20 and female 20) aged between 25_45.patientswere included based on their symptoms **RESULTS:** Based on survey reports among 40 (100%) respondents 85% (34) have moderate level of stress, 10% (4) have high level of stress and 5% (2) have low level of stress. **CONCLUSION:** The study found that According to siddha aspect, etiology of peptic ulcer disease was mentioned as anger and stress were one of the cause for the disease. There is significant association present between stress and peptic ulcer disease. Study says that PUD patients 85% (34) had moderate level of stress, therefore physicians should pay close attention to the relationship between the prevalence of PUD and counselling therapy.

KEY WORDS: Perceived stress scale, Gunmam, peptic ulcer, anger

I. INTRODUCTION

A peptic ulcer is defined as a disruption of the mucosal integrity of the stomach and duodenum, leading to a local defect or excavation due to active inflammation. Acid peptic disorders affect four million people worldwide annually and have an estimated lifetime prevalence of 5-10% in the general population. The prevalence of acid peptic ulcers was 4.72%, and the lifetime prevalence was 11.22% in India. Since the mid-20th century, stress has been considered as the main cause of Peptic ulcer disease. Multiple social, psychological and biological factors contribute to mental health problems. According to the World Health Organization, Stress can be defined as a "State of worry or mental tension caused by a difficult situation". Stress is a prime factor that aggravates acid peptic disorders; several studies suggest that psychological stress plays a major role in the onset and course of acid peptic disease.

AIM:

To study the role of stress in peptic ulcer disease patients from the Siddha perspective.

OBJECTIVE:

To assess the association of stress level with symptoms of gunmam in peptic ulcer disease patients

II. MATERIALS AND METHODS:

Table :1 STUDY DESIGN

STUDY TYPE	Descriptive study
STUDY DESIGN	Cross-sectional study
STUDY PLACE	Outpatient department, Department of Pothumaruthuvam, Govt. Siddha Medical College &Hospital, Palayamkottai – 627002
STUDY PERIOD	4Months (August 2023 to November 2023)
SAMPLE SIZE	40 (20 male and 20 female)
SAMPLING PROCEDURE	Non-random sampling
METHOD OF APPROACH	Symptomatic approach.

Table :2

CRITERIA FOR INCLUSION	CRITERIA FOR EXCLUSION
Age: 25-45years Sex: Both male and female Presenting epigastric pain, vomiting, abdominal pain, nocturnal pain, early satiety, burping, regurgitation Patients who were willing to participate	Age group: below 25 and above 45 years of age, Pregnancy and lactating women, Diabetic mellitus, Hypertension, chronic kidney disease, Bronchial asthma and Rheumatoid arthritis.

III. RESULTS

FIG 1

AGE DISTRIBUTION

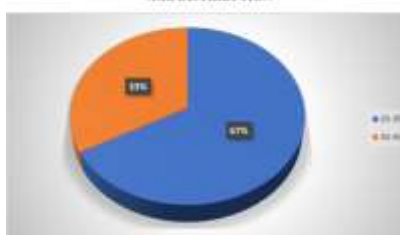


FIG 2

SMOKING

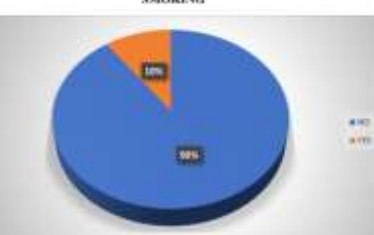


FIG 3

WORKING HOURS

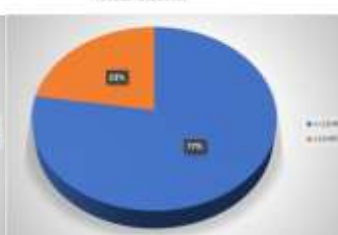


FIG 4

NSAID USERS

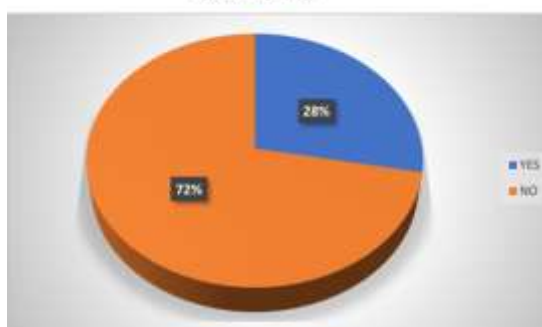


FIG 5

ALCOHOL USERS

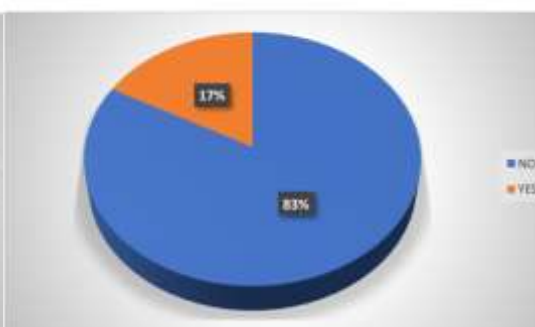


Table : 3

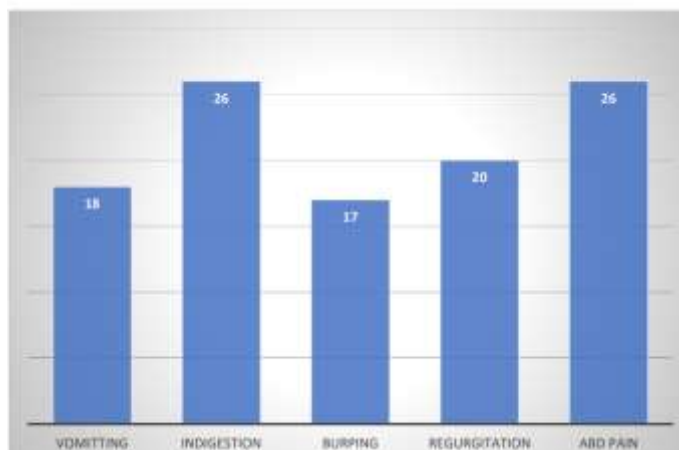
HYPOTHESIS	VARIABLE 1	VARIABLE 2	P VALUE	SIGNIFICANCE
I	PSS	Vomiting	0.035	S
II	PSS	Indigestion	0.041	S
III	PSS	Belching	0.002	S
IV	PSS	Regurgitation	0.033	S
V	PSS	Abdominal Pain	0.033	S

H_0 The above given variable 1 and variable 2 are independent of each other

H_a The above given variable 1 and variable 2 are not independent of each other

Since the P value < 0.05 , null hypothesis is rejected and the alternate hypothesis is accepted.

FIG 6
FREQUENCY OF SYMPTOMS



Among 40 respondents of PUD patients 65% (26) had a symptom of indigestion and abdominal pain, 50% (20) had a symptom of

regurgitation, 45% (18) had a symptom of vomiting and 42.5% (17) had a symptom of burping.

PERCEIVED STRESS SCALE

Table :4

PERCEIVED STRESS SCORING	TOTAL PSS FREQUENCY	PERCENTAGE	LEVEL OF STRESS
0-13	2	5%	LOW
14-26	34	85%	MODERATE
27-40	4	10%	HIGH
Total	40	100%	

IV. DISCUSSION

The study concludes that there is a significant association between stress levels and severity of peptic ulcer disease. Generally, stress is the primary factor that aggravates many diseases. Mental health problems such as stress and depressive mood are significantly associated with a history of peptic ulcer disease, and other risk factors are smoking, age, genetics, and low socioeconomic status. According to Siddha's classical text, anger and stress are some of the causes of peptic ulcer disease. The patients with symptoms such as vomiting, burping, abdominal pain, regurgitation, and indigestion showed a low score on PSS, grading it to be low stress, as well as a high score on PSS, grading it to be high stress, in accordance with the Siddha text. The patients with symptoms elaborated in Siddha's texts were recruited in the study, and the association between the severity of symptoms and PSS scores was assessed using Pearson's chi of association, considering both of them as nominal variables. Based on study reports, among 40 respondents,

85% (34) have a moderate level of stress, 10% (4) have a high level of stress, and 5% (2) have a low level of stress.

V. CONCLUSION

The study revealed that stress is related to the severity of the peptic ulcer. There is a significant association between stress and peptic ulcer disease. The Study reveals that PUD patients 85% (34) had moderate levels of stress. Patients with severe symptoms of PUD showed severe levels of stress as per PSS (Perceived Stress Scale). Therefore, physicians should pay close attention to the relationship between the prevalence of PUD and counselling therapy. This opens up opportunities for the involvement of Siddha's special therapies such as Pranayamam, Yoga, and Meditation. For the management of stress as a complete regimen, which in turn helps in the prognosis of treating peptic ulcer.

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