



lifestyle practices and stress among patients with dyspepsia

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ABSTRACT

Dyspepsia or indigestion is a common complaint associated with many disease conditions of the gastrointestinal system. The present descriptive study was conducted among patients with dyspepsia attending the Department of Medical Gastroenterology, New Medical College Hospital, Thrissur. The objectives of the study were to assess the life style practices and stress among patients with dyspepsia. The conceptual frame work for this study was based on Dr. Nola J Pender's Health Promotion Model (HPM). A sample of 150 patients with dyspepsia who have undergone oesophagoduodenoscopy was selected by purposive sampling. Their socio-demographic details, clinical details, life style practices, and stress symptom severity were assessed by a semi structured interview schedule. Findings revealed that 55.3% of patients had organic dyspepsia. Majority of the patients were experiencing more than one dyspeptic symptom. It was found that the lifestyle practices followed were good among 53% of patients. The stress symptom severity reported was mild among 48% of patients and moderate among 43%. It was revealed that lifestyle practices of patients with dyspepsia has got significant association with their gender ($p < 0.01$), occupational status ($p < 0.01$). So, also significant association was obtained for severity of stress symptoms with their age ($p < 0.01$).

KEYWORDS : Dyspepsia, Life style practices, Stress

INTRODUCTION

Prosperity and wellbeing of humanity is vested upon their health. Rapid globalization and industrialization occurring in developing countries have produced much advancement in social and economic status of the people. Along with its contribution to socioeconomic prosperity, it is also playing a major role in the emergence of life style diseases. Lifestyle practices are also habits and customs which perform habitually or customarily. Lifestyle diseases are associated with the way a person or group of people lives. Now days it is seen that life style diseases are more common among people because of unhealthy life style practices. These practices contribute to the development of various gastro intestinal diseases (Peptic Ulcer Disease, Cancer of stomach, Gastritis, GERD, Non ulcer dyspepsia etc.). Daily life stress can also lead to dyspepsia, gastritis, ulcers etc. It is found that patients having upper gastro intestinal conditions complaint indigestion. It is also known as "dyspepsia" which is derived from the Greek words "Dys" and "Pepe" that means difficult digestion. It is broadly defined as pain or discomfort centered in the upper abdomen, with symptoms such as epigastric pain, post prandial fullness, early satiety, anorexia, belching, nausea, vomiting, upper abdominal bloating, even heart burn and regurgitation. Dyspepsia is usually associated with following conditions; upper gastrointestinal disorders such as peptic ulcer disease, acute gastritis, gallstones, esophageal spasm, gastric neoplasm, functional dyspepsia and other gastrointestinal disorders such as pancreatic disease, hepatic disease and colonic carcinoma. Systemic diseases associated with dyspepsia are renal failure and hypercalcemia. Dyspepsia can also occur due to usage of drugs such as NSAIDs, aspirin, iron, potassium supplements, corticosteroids and digoxin. Other factors that may contribute to the development of dyspepsia include alcohol consumption, caffeine and psychological (eg: anxiety and depression). Patients having dyspeptic symptoms for the past three months with onset at least six months before diagnosis in the absence of structural abnormality on the upper gastrointestinal endoscopy and metabolic or systemic causes explaining the symptoms are classified as functional dyspepsia. Dyspepsia occurs usually at the age of 16 or above. Dyspepsia is known to result from organic causes, majority suffer from non ulcer dyspepsia. Dyspepsia can thus be a manifestation of Gastro Esophageal Reflux Disease (GERD), Peptic Ulcer Disease or Functional Dyspepsia (FD).

METHODOLOGY

A quantitative non experimental research approach was chosen for the present study. Research design selected for present study was descriptive design to determine the life style practices and stress among patients with dyspepsia who had undergone endoscopy and the study was carried out in the department of Medical Gastroenterology at New Medical College Hospital, Thrissur. The sample consisted of 150 patients with dyspepsia who met full selection criteria for the study. Non probability purposive sampling was used for the study.

Data were collected by using the following tools.

Tool 1: Socio-Demographic data

Tool 2: Clinical data sheet

Tool 3: Structured questionnaire to assess life style practices

Tool 4: Stress symptom severity scale

Data were organized, tabulated and analyzed using descriptive and inferential statistics with statistical package for social science (SPSS) 22 version.

RESULTS

Among 150 patients with dyspepsia, majority of them (73.6%) were above the age of 40 years among which 58% were males. Majority (85.3%) of dyspeptic patients had monthly family income \leq 5000 INR. Based on dyspeptic symptom experienced, most of patients were experiencing more than one dyspeptic symptom, among that abdominal pain/discomfort was reported by majority of patients (nearly 72.7%). The endoscopic diagnosis was organic dyspepsia for 55.3% of patients. Non-ulcer dyspepsia and ulcer dyspepsia were diagnosed among 23.4% and 21.3% of patients respectively. When considering the lifestyle practices, nearly 45% of patients were taking more spicy diet. When considering the sleeping habit, 74% of patients were sleeping soon after dinner. Based on the habit of substance abuse, nearly 19% of patients are still using alcohol while 17.3% of patients had used alcohol, but now stopped. Almost 87% of patients were not doing any kind of exercises daily. When considering the sleeping pattern, most (76%) of a patient was sleeping at late night (after 11pm). More than one stress symptoms were presented in dyspeptic patients. Also it is clear that, majority (66%) of patients reported fatigue always. The stress symptoms like eating too much, oral ulcers were experienced by very few (only 5.3%).

Table 1
Distribution of patients with dyspepsia based on lifestyle practices (n=150)

Lifestyle practice score	Frequency	Percentage
Good	79	52.7
Average	71	47.3
Poor	00	00

As seen in table 1, good lifestyle practices were followed by almost 53% of patients whereas no patients reported that they followed poor lifestyle practice. Almost 48% of patients were come under average lifestyle practice.

Table 2
Distribution of patients with dyspepsia based on stress symptom severity (n=150)

Stress symptom severity	Frequency	Percentage
Mild	72	48
Moderate	65	43.3
Severe	13	8.7

From Table 2, it is clear that, almost 9% of patients with dyspepsia had severe stress symptoms where 43% of patients were suffering from moderate level of stress symptoms. Mild level of stress symptoms were reported by 48% of patients.

Table 3
Association between lifestyle practices of patients with dyspepsia and gender (n=150)

Gender	lifestyle practices score		df	Chi square	P value
	<Median	≥ Median			
Male	30	57	01	11.06	0.001
Female	39	24			

Table 3 shows that, the chi square value obtained is 11.06 which is significant (p<0.01).Hence the null hypothesis is not accepted and it is interpreted that, there is significant association between lifestyle practices of patients with dyspepsia and their gender.

Table 4
Association between lifestyle practices of patients with dyspepsia and occupational status (n=150)

Occupational status	lifestyle practices score		df	Chi square	P value
	< Median	≥ Median			
Not employed	34	17	02	14.94	0.001
Self employed	23	50			
Private/Govt.employed	12	14			

From table 4, it is observed that the chi square value obtained is 14.94.The p value obtained is 0.001 which is significant at 0.01 level. Hence the null hypothesis is not accepted and it is interpreted that, there is significant association between lifestyle practices of patients with dyspepsia and their occupation.

Table 5
Association between stress symptom severity of patients with dyspepsia and age (n=150)

Age in years	Stress Symptom severity		df	Chi square	P value
	<Median	≥Median			
≤30	10	7	02	14.6	0.001
31-60	36	59			
>60	28	10			

It is observed that the chi square value obtained is 14.6.The p value obtained is 0.001 which was significant (p<0.01).Hence the null hypothesis is not accepted and it is interpreted that, there is

significant association between stress symptom severity of patients with dyspepsia and their age.

DISCUSSION

Findings from the present study showed that the mean age of the patients was 50.4±1.3 years. Most of the respondents (58%) were males. But findings from Mahadeva S, Rampal S, Yadav H, Goh K L. It showed that the mean age was 40.4±15.3 and majority of patients were females. A cross sectional study conducted by Ali AH, Mahdi Afshari and Azam Dehghani among 2210 patients in south east of Iran, showed that the mean age was 43.4 years. In another study conducted by Mohsen AM, Mohammed Ali A, Zahra Hashmian, the mean age was 39.16±14 years (range: 13-80 years). These differences in findings may be attributed to the nature of the sample selected and the different study settings. The present study revealed that nearly 45% of patients with dyspepsia were taking more spicy diet and many of them were used to take tea/ coffee. In this study almost 19% of patients were alcoholic and also found that 17.3% had a history alcohol intake. This is supported by a study conducted by Phavichitr N, Koosiriwichian K and Tantibhaedhyangkul R among Thai school children .They found that prevalence of self reported dyspepsia among school children were high, who had the habit of alcoholism (OR=2.4).

Almost 9% of patients with dyspepsia had severe stress symptoms where 43% of patients were suffering from moderate level of stress symptoms. This findings are supported by another study done by De la Roca-Chiapas J M, Solis-Ortiz S,Fajardo - Araujo M, Sosa M. This cross sectional study results showed that psychosocial stress, mood symptoms and copying style are predictors of functional dyspepsia. The endoscopic diagnosis for the patients in the present study revealed that 21.3% had ulcer dyspepsia. But a higher percentage was reported by Farnaz Khademolhosseini etal. The prevalence was higher in females, NSAIDs users, psychologically distressed, recurrent headache, anxiety, nightmares and past history of gastrointestinal disease. In the present study also, many patients reported these symptoms. The findings of the present study were supported by another study, in that the investigators assessed the patterns of dietary behaviors in four domains; meal patterns, eating rate, intra-meal fluid intake and meal-to-sleep interval, as identified by using a pre-tested comprehensive questionnaire. Patients with Chronic Ulcer Disease(CUD) were identified using the Rome III diagnostic criteria. The results were CUD was prevalent in 15.2 % (n=723) of patients. Early satiation occurred in 6.3 % (n=302) of patients, postprandial fullness in 8 % (n=384) of patients and epigastric pain in 7.8 % (n=371) of patients. They defined two distinct classes of meal patterns: 'regular' and 'irregular'. For eating rates, three classes were defined: 'moderate', 'moderate-to-slow' and 'moderate-to fast'. In conclusion, the irregular meal pattern and the moderate to fast eating rate were significantly associated with greater odds of CUD.34 But in the present study, the dyspeptic symptoms reported were abdominal pain or discomfort (72.7%), heart burn (69.3%), early satiety (66.7%), post prandial fullness (64%) and nausea (61.3%).

CONCLUSION

Based on the study findings following conclusions were drawn. Dyspepsia is more influenced by lifestyle changes and stress level they are undergoing. In the present study more no of males are affected with dyspepsia and most of them were age more than forty years. Organic dyspepsia was more prevalent in this setting. Majority of patients followed more spicy diet and used meat at least once in a week. Most of the patients never took food on time and had tea / coffee daily. It is also evident from the study is that majority of dyspeptic patients slept soon after dinner and that also at late night. Almost thirty percentage of dyspeptic patients had used over the counter medication. Findings of the study show that more than one dyspeptic symptoms and stress symptoms were present in dyspeptic patients. Findings from the study showed that almost fifty two percentage of patients with dyspepsia suffering from moderate to severe stress symptoms. There is significant association between lifestyle practices of patients with dyspepsia gender, occupation,

and marital status. Also there is significant association between stress of patients with dyspepsia with their age and gender.

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