



**A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURE TEACHING PROGRAMME ON HEALTHY LIFESTYLE PRACTICES IN PREVENTION OF PEPTIC ULCER DISEASES AMONG ADOLESCENTS IN SELECTED COLLEGES IN BANGALORE, KARNATAKA, INDIA**

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**ABSTRACT**

A study to assess the effectiveness of structure teaching programme on healthy lifestyle practices in prevention of peptic ulcer diseases among adolescents in selected colleges in Bangalore. A pre-experimental one group pre testpost test design was used to assess the knowledge of adolescents on healthy lifestyle practices in prevention of peptic ulcer diseases. Sample of the study comprise of adolescents in selected colleges, Bangalore. The pre-test score was inadequate (83%) and after STP Post test score was adequate (86%). There was a significant improvement obtained from structured teaching programme on knowledge regarding healthy lifestyle practices in prevention of peptic ulcer.

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**INTRODUCTION**

The stomach is an enlarged segment of the digestive tract in the left superior part of the abdomen. Disease of the stomach and small bowel are common and cause significant morbidity, economic hardship and health consequences. Peptic ulcer is quite a common condition that affects a number of people world-wide. Peptic ulcer can be defined as a discontinuity in the mucosal lining of the stomach or duodenum which result from continuous action of gastric acid and digestive enzymes of the mucosal surface. It is important to note that *H. pylori*, use of Non-Steroidal anti-inflammatory drugs and lifestyle conditions play a major role in the development of peptic ulcer. Peptic ulcer occurs when the balance between when the acid pepsin digestion and defence mechanism of the mucosa is disturb. Peptic ulcer in adolescents is attributed to stress, improper eating and infection. Deckelbaum Richard et al (2000) conducted a retrospective study of finding the causative factors for upper gastro intestinal bleeding disorders. The study was conducted among 68 children who were aged between 15-19 years. The study found that commonest cause of upper gastrointestinal bleeding was due to bacterial infections and change in food habits. Most commonest of ulcers were duodenal and gastric ulcers which accounted for 50%.

Another study by RosenstockS. *et al* (2003) found that the main causes peptic ulcers was tobacco smoking and use of drugs. Harward school of public healthy(2010) conducted a cohort study to determine the preventive measures of occurrence of peptic ulcers. The study found that clients consuming high fibre diet reduce the risk for developing duodenal ulcer. Food sources such as oats, legumes, barley and certain fruits and vegetables were found to be protective and reduce the risk by 60%. Other factors concluded in the study where avoidance of alcohol and coffee reduce occurrence of peptic ulcer.

Peptic ulcer is the primarily reported cause of death approximately 6500 persons in the United State each year. The estimated direct costs of patient care and in-direct costs caused by work and productivity loss for peptic ulcer disease are \$6 billion annually. Before 1983 the major causes of peptic ulcer disease were considered to excess acid, diet, smoking and stress.

Approximately 60% respondents believed that ulcers were caused by too much stress 17% believed that eating spicy food causes ulcers and 27% believed that a bacterial infection caused ulcers. The belief that stress was the highest among cause persons aged 18-24years 78% and among person with annual household income of less than \$15,000.15.

According to study conducted in India statistical ratio of peptic ulcer disease as done in the year 2011 is 14,488,092 is the prevalence of peptic ulcer among the adolescent age group of

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15-25 years. In the general population in the state of Kashmir in India the incidence of peptic ulcer was determined by using the endoscopy procedure randomly selected population of 2763 adults aged about 15 years to 25 years the point prevalence of peptic ulcer disease is 6% and life time prevalence is 25%. Duodenal to gastric ulcer ratio was 17:11. Duodenal ulcer and gastric ulcer was found more common among men. The prevalence of peptic ulcer increased with age, the peak prevalence of 28.8% was found to be in the 5<sup>th</sup> decade of life.

According to WHO study published in the year 2011, people who died due to peptic ulcer in India is 108,392 per annum. India is ranked number 5 in the world in terms of occurrence of peptic ulcer disease. According to this study, adolescents of the age group 16 – 20 years are affected by peptic ulcer. After thorough review of literatures on peptic ulcer and researcher's experience, it is necessary to educate the adolescence regarding prevention of peptic ulcer by following healthy life style practices.

**Statement of the problem**

A study to assess the effectiveness of structure teaching programme on healthy lifestyle practices in prevention of peptic ulcer diseases among adolescents in selected colleges in Bangalore.

**Objectives of the study**

- To assess the knowledge regarding peptic ulcer diseases, among adolescence.
- To assess the effectiveness of structured teaching program on healthy lifestyle practices in prevention of peptic ulcer diseases by comparing pre test and post test scores among adolescents in selected colleges in Bangalore,
- To administer STP on healthy lifestyle practices in prevention of peptic ulcer diseases among adolescents in selected colleges in Bangalore,
- To assess the association of knowledge score with the selected demographic variables.

**METHODOLOGY**

Pre-experimental one group pre-test post-test design was adopted for this study. The study was conducted at selected colleges in Bangalore comprising a total population of adolescents from selected colleges in Bangalore. Based on inclusion criteria, probability simple random sampling technique was used to select the sample of 30 adolescents. Inclusion criteria includes

1. Adolescent students age group between 15-18 years
2. Willing to participate in the study.
3. Who can speak and understand English and Kannada

Exclusion criteria includes

1. Students who are not willing to participate in the study.

Tools and score interpretation: Tools consists of two sections

Section 1: Demographic Profile of adolescence  
 Section 2: Structure self administer questionnaire to assess knowledge among adolescence regarding

**Healthy life styles practices in prevention of peptic ulcer.**

In order to measure the knowledge level structured knowledge questionnaire was used. This consists of 20 questions related to healthy lifestyle practices in prevention of peptic ulcer and 5 questions regarding demographic variables.

Each multiple choice has 4 options with one correct response with a score of “1” and “0” for the wrong answer.

**Data collection procedure**

The necessary administrative permission was obtained from the college authorities. After taking the informed consent, the data were collected by using structured knowledge questionnaire.

**Data analysis and interpretation**

The data were interpreted under the following sections

- Section I: Demographic data.
- Section II: Distribution of pre-test and post-test knowledge regarding prevention of peptic ulcer.
- Section III: Distribution of mean and standard deviation of the level of knowledge regarding prevention of peptic ulcer.

**RESULTS**

The demographic profile of adolescents, shows that 90%(27) of subjects were age group between 18-20years. Majority were male 21(17%) and only 9(30%) were female. Regarding diet pattern, 6(20%) were belongs to non-veg diet, 2(6%) were veg diet and majority were 22(73%) were belongs to mixed diet, 40% of adolescence (12) were having irregular diet habits and 60%(18) were having regular diet habits. As per hobbies and habits were concerned 66%(20) were having habit of listening music, 20%(6) were having habit of online chatting, 3%(1) were having habit of reading newspapers and only 10%(3) adolescence for having habit of doing regular exercises.

**Table 1**

Level of knowledge	Pre-test knowledge score		Post-test knowledge score	
	Frequency(f)	Percentage (%)	Frequency(f)	Percentage (%)
Inadequate	25	83.4%	0	0%
Moderate	5	16.6%	4	13.4%
Adequate	0	0%	26	86.6%

Frequency and percentage distribution of adolescents according to the level of knowledge score. n=30

The data presented in above table 1 shows that in pre-test 83.4% of adolescents had inadequate knowledge, 16.6% of the adolescents had moderate knowledge regarding prevention of peptic ulcer whereas in post-test 86.6% of adolescents had adequate knowledge and 13.4% of adolescents had moderate knowledge on prevention of peptic ulcer.

**Table 2**

Sl/no	Group	Pre-test			Post-test		
		Mean	Standard deviation	Mean %	Mean	Standard deviation	Mean %
1	Knowledge	6.65	2.17	22.16	25.85	11.7	86

Distribution of mean and standard deviation of the level of knowledge regarding peptic ulcer. n=30

The data presented in table 2 shows that in the pre-test the mean is 6.65 with standard deviation 2.17. The mean % is 22.16. In post test, the mean is 25.85 with standard deviation 11.7. The mean % is 86. This shows that there is a significant

difference between the mean pre test and post test knowledge score of adolescents regarding prevention of peptic ulcer.

## CONCLUSION

The peptic ulcer is due to improper healthy life style practices among adolescents and it is mainly due to stress and eating spicy foods. Proper education to the adolescents may change their practice habits and peptic ulcer can be prevented. After administration of structured programme on knowledge regarding healthy life style practices in prevention of peptic ulcer, the knowledge was gained among adolescents.

## References

1. Bonnenberg A, Everhart J.E. Health Impact of Peptic Ulcer in the United States. *AM J Gastroenterol* 1997; 92: 614 – 620.
2. Ostensen H, Gudmundsen TE, Ostensen M, Burhol PG, Bonnevie O. Smoking, alcohol, coffee, and familial factors: any associations with peptic ulcer disease? A clinically and radiologically prospective study. *Scand J Gastroenterol*. 1985 Dec; 20(10):1227-35.
3. Hua MC1, Kong MS, Lai MW, Luo CC. Perforated peptic ulcer in children: a 20-year experience. *J PediatrGastroenterolNutr*. 2007; 45(1):71-4.
4. Afridi MA. Tobacco use as contributory factor in peptic ulcer disease. *J Coll Physicians Surg Pak*. 2003; 13(7):385-7.
5. M S Khuroo, R Mahajan, S A Zargar, G Javid, and S Munshi. Prevalence of peptic ulcer in India: an endoscopic and epidemiological study in urban Kashmir. *Gut*. 1989; 30(7): 930–934.
6. Rajesh P, Dikshit, Garima Mathur, Sharayu Mhatre, and B. B. Yeole. Epidemiological review of gastric cancer in India. *Indian J Med PaediatrOncol*. 2011; 32(1): 3–11.
7. El Mouzan MI, Abdullah AM. Peptic ulcer disease in children and adolescents. *J Trop Pediatr*. 2004; 50(6):328-30.
8. Richard J. Deckelbaum, Claude C. Roy, Jeannette Lussier-Lazaroff, and Claude L. Morin. Peptic ulcer disease: a clinical study in 73 children. *Can Med Assoc J*. 1974; 111(3): 225–228.
9. Hua MC1, Kong MS, Lai MW, Luo CC. Perforated peptic ulcer in children: a 20-year experience. *J Pediatr Gastroenterol Nutr*. 2007;45(1):71-4.
10. Ko JK1, Cho CH. Alcohol drinking and cigarette smoking: a "partner" for gastric ulceration. *Zhonghua Yi Xue Za Zhi (Taipei)*. 2000; 63(12):845-54.
11. Rosenstock S1, Jørgensen T, Bonnevie O, Andersen L. Risk factors for peptic ulcer disease: a population based prospective cohort study comprising 2416 Danish adults. *Gut*. 2003;52(2):186-93.
12. Moshkowitz M, Brill S, Konikoff FM, Averbuch M, Arber N, Halpern Z. Additive deleterious effect of smoking on gastroduodenal pathology and clinical course in *Helicobacter pylori*-positive dyspeptic patients. 2000; 2(12):892-895.
13. Suadicani P1, Hein HO, Gyntelberg F. Genetic and life-style determinants of peptic ulcer. A study of 3387 men aged 54 to 74 years: The Copenhagen Male Study. *Scand J Gastroenterol*. 1999; 34(1):12-7.
14. Lanza FL1, Chan FK, Quigley EM. Guidelines for prevention of NSAID-related ulcer complications. *Am J Gastroenterol*. 2009; 104(3):728-38.
15. Nathália Dalcin VOMERO and Elisângela COLPO. Nutritional Care in Peptic Ulcer. *Arq Bras Cir Dig*. 2014; 27(4): 298–302.
16. Celinski K, Konturek PC, Konturek SJ, Slomka M, Cichoż-Lach H, Brzozowski T, Bielanski W. Effects of melatonin and tryptophan on healing of gastric and duodenal ulcers with *Helicobacter pylori* infection in humans. *J Physiol Pharmacol*. 2011; 62(5):521-6.
17. Harrison J. Shull, M. D. Diet in the management of peptic ulcer. *JAMA*. 1959; 170(9):1068-1071.
18. Jiao L1, Mitrou PN, Reedy J, Graubard BI, Hollenbeck AR, Schatzkin A, Stolzenberg-Solomon R. A combined healthy lifestyle score and risk of pancreatic cancer in a large cohort study. *Arch Intern Med*. 2009;169(8):764-70.
19. Sur D1, Mukhopadhyay SP. A study on smoking habits among slum dwellers and the impact on health and economics. *J Indian Med Assoc*. 2007;105(9):492-6, 498.
20. Kanbay M1, Gür G, Arslan H, Yilmaz U, Boyacioglu S. The relationship of ABO blood group, age, gender, smoking, and *Helicobacter pylori* infection. *Dig Dis Sci*. 2005 ;50(7):1214-7.
21. David Y Graham. History of *Helicobacter pylori*, duodenal ulcer, gastric ulcer and gastric cancer. *World J Gastroenterol*. 2014; 20(18): 5191–5204.

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