

ABSTRACT

A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge about Peptic Ulcer among First-year D.T.Ed. Students at Ragavendra Teacher Training Institute at Keezhamoongiladi

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ABSTRACT

The peptic ulcer is one of the most prevalent problems in the world. The National Health Survey reports the incidence of duodenal ulcer peaks in the age of 18–40 years, with male:female ratio of 2:1.

Background: In the past, peptic ulcer means living with a chronic condition.

Aim: The aim of this study was to assess the existing knowledge about peptic ulcers among first-year D.T.Ed. students and to test the effectiveness of a structured teaching program on knowledge about the prevention of peptic ulcers.

Materials and methods: One group of pretest–posttest design (quantitative approach) was adopted for the study. Fifty first-year D.T.Ed. students were selected by a simple random sampling technique. Knowledge was assessed by using a structured interview technique and data were analyzed by means of descriptive and inferential statistics.

Results: Most of the samples in the study [32 (64%)] were between the age-group of 18–20 years. In the pretest, 44 (88%) students had inadequate knowledge, only 6 (12%) had moderately adequate knowledge, and no one had adequate knowledge of peptic ulcers. With respect to the incidence of peptic ulcer in the family, 21 (42%) students' parents had peptic ulcer, 4 (8%) students' siblings had peptic ulcer, and 25 (50%) students did not have a family history of peptic ulcer. In the pretest, 40 (80%) students had inadequate knowledge, and 10 (20%) had moderately adequate knowledge. No one had inadequate knowledge. In the posttest, 6 (12%) students had moderately adequate knowledge, and 44 (88%) had adequate knowledge. It shows that the knowledge level has improved in the posttest and indicates that the structured teaching program was effective.

Conclusion: The knowledge of peptic ulcer was assessed by using a structured interview technique. After a structured teaching program about peptic ulcers, there was a significant improvement in the knowledge level. The study revealed that the structured teaching program was effective in improving the knowledge regarding the prevention of peptic ulcers.

Keywords: Effectiveness, Peptic ulcer, Structured teaching program.

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INTRODUCTION

The stomach is a hollow muscular organ located on the left side of the abdominal cavity, just below the diaphragm. When empty, it has a volume of 50 mL. However, it has the ability to expand and accommodate between 1 and 1.5 liters of solids and liquids. In some cases, it can expand even further to hold several liters of food or liquid. Gastric mucosal erosions that are 0.5 cm or larger are commonly classified as peptic ulcers, which are a type of peptic illness. A gastrointestinal often acidic and excruciatingly painful digestive tract. Peptic ulcer disease (PUD) occurs with the greatest frequency in people between the ages of 40 and 60 years. The occurrence of stomach ulcers peaks between the ages of 50 and 60 years, and the ratio of men to women is approximately equal. The incidence of duodenal ulcers peaks between the ages of 20 and 50 years old. Nonetheless, the gender split is 2:1.^{1,2} The peptic ulcer is one of the most prevalent problems in the world. The Healthy People 2010 goal to “decrease hospitalizations” reflects the significance of the disease. Peptic ulcer-related deaths in the United States decreased from a baseline rate of 71 per 100,000 to a target rate of 46 per 1,00,000 population. The worldwide prevalence varies with

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stomach ulcers being more common in Asia, particularly in Japan, and duodenal ulcers predominating in the Western population. Although the prevalence of peptic ulcer disease has decreased over the past 100 years in Western nations, about 1 in 10 Americans are still afflicted. In the United States, the yearly financial burden of peptic ulcer illness, including direct and indirect costs, is estimated to be US\$3.3 or 4 billion.^{3–5} It is anticipated that the influence of

peptic ulcer illness on human health and wealth economics will continue to be a significant issue in the future because it is still widespread and peaks among the elderly. John Lykoudis, a general practitioner in Greece, was one of the first medical professionals to use antibiotics to treat patients with peptic ulcer disease, even before it was widely recognized as a potential treatment option. His pioneering work began in 1958. *Helicobacter pylori*, also known as *H. pylori*, is a bacterium that is now recognized as the primary cause of peptic ulcer disease. It was discovered as a causative factor in 1982 by two Australian scientists, Barry J Marshall and J Robin Warren.^{6–8} They conducted research that showed that the infection with *H. pylori* was the primary cause of most stomach ulcers and gastritis. Dr. Marshall and his longtime associate were awarded the Nobel Prize in Physiology or Medicine in 2005 by the Karolinska Institute in Stockholm. Dr. Warren was honored for his role in the “discovery of *H. pylori* and its significance in gastritis and peptic ulcer disease.” At University of Western Australia (UWA) in Perth, Western Australia, Professor Marshall oversees a molecular biology laboratory and continues to conduct research on “*H. pylori*.”^{9–12}

OBJECTIVES

- To assess the existing knowledge about peptic ulcer among first-year D.T.Ed. students at Keezhamoongiladi.
- To test the effectiveness of the structured teaching program on knowledge about the prevention of peptic ulcer.

To associate the pretest knowledge of prevention of peptic ulcer with certain demographic variables, such as age and family history of peptic ulcer.^{13–15}

HYPOTHESES

H1: There will be a significant difference between knowledge of peptic ulcer disease before and after the structured teaching program.

H2: The posttest knowledge on peptic ulcer will be significantly higher than the pretest knowledge among the second-year D.T.Ed. students after structured teaching program (STP).

MATERIALS AND METHODS

The study employed a pretest–posttest design, which is a quantitative research technique. Fifty students were chosen using a basic random sample procedure based on the inclusion and exclusion criteria. Participants in the study provided the researcher with formal authorization and informed consent. Each sample received an explanation of the study’s objectives. Using structured interviewing techniques, demographic data were gathered, and knowledge assessments were made utilizing pre- and posttests. The data were analyzed using paired tests, frequency, percentages, means, and other descriptive and inferential statistics.^{16–18}

RESULTS

Most of the samples in the study [32 (64%)] were between the age-group of 18 and 20 years in the pretest (Figs 1 to 3 and Table 1). A total of 44 (88%) students had inadequate knowledge, only 6 (12%) had fair knowledge, nobody had enough data on peptic ulcer with respect to incidence of peptic ulcer in the family. Among the students, 21 (42%) had parents with peptic ulcer, 4 (8%) has siblings with peptic ulcer, and 25 (50%) did not have a family history

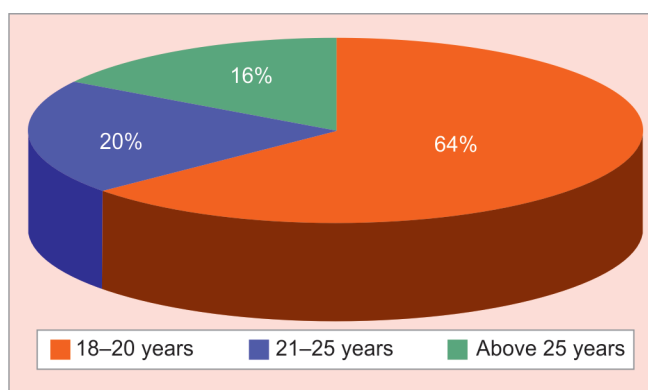


Fig. 1: The distribution of demographic variables in terms of age among first-year D.T.Ed. students

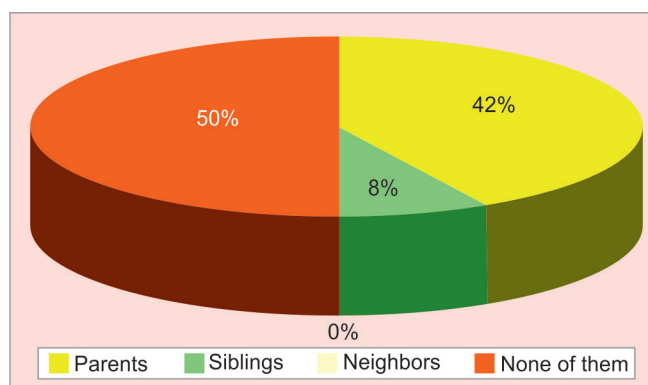


Fig. 2: The distribution of demographic variables in terms of the incidence of peptic ulcer in the family among first-year D.T.Ed. students

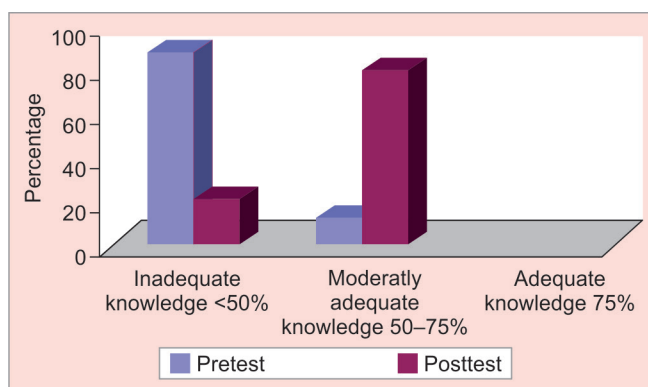


Fig. 3: The distribution of knowledge levels among first-year D.T.Ed. students regarding peptic ulcer was assessed in pretest and posttest

of peptic ulcer. The level of knowledge of first-year D.T.Ed. students on prevention of peptic ulcer was measured in the pretest and posttest. In the pretest, 40 (80%) students had inadequate knowledge, and 10 (20%) had somewhat competent knowledge. Nobody lacked knowledge, though most of them had inadequate knowledge on peptic ulcer. In the posttest, 6 (12%) students had adequate knowledge, and 44 (88%) had fairly adequate understanding, demonstrating an improvement in knowledge level. This indicates that the structured teaching programmer was effective.^{19–23}

Table 1: Distribution of demographic variables of D.T.Ed. students (N = 50)

S.No.	Demographic variables	Frequency	Percentage
1.	Age		
	18–20 years	32	64%
	21–25 years	10	20%
	Above 25 years	8	16%
2.	Gender		
	Male	7	14%
	Female	43	86%
3.	Qualification		
	Higher secondary	40	80%
	Bachelor degree	9	18%
	Others	1	2%
4.	Religion		
	Hindu	48	96%
	Christian	2	4%
	Muslim	–	–
	Others	–	–
5.	Marital status		
	Married	15	30%
	Unmarried	35	70%
	Widower	–	–
6.	Incidence of peptic ulcer in the family		
	Parents	21	42%
	Siblings	4	8%
	Neighbors	–	–
	None of them	25	50%
7.	Source of information on peptic ulcer		
	Television	20	40%
	Radio	1	2%
	Magazines	1	2%
	Health professionals	21	42%
	Others	7	14%

NURSING IMPLICATIONS

Nursing Service

- The nurses need to take up responsibilities to create awareness about peptic ulcers among the students to improve their knowledge.
- Nurses should use a wide variety of the intervention to prevent the occurrence of peptic ulcers.
- Nurses play an important role in preventive aspects of peptic ulcer.^{24–26}

Nursing Education

- This study emphasized the need for developing good teaching skills.
- Nursing curriculum should provide clinical experience to all those who conduct STP in various settings.

Nursing Research

- The application of research findings will be more successful when it is disseminated through conferences and scholarly journals.
- Research findings give evidence-based practices.

RECOMMENDATIONS

- Other college locations and populations could be used for a similar study.
- A study can be carried out using a sizable sample.

A similar study can be carried out utilizing different teaching methods, such as video teaching programmers, self-study modules, etc.^{27–29}

CONCLUSION

The knowledge of peptic ulcer was assessed using a structured interview technique among first-year D.T.Ed. students at Keezhamoongiladi. The knowledge of peptic ulcers significantly improved after an organized teaching program among second-year D.T.Ed. students. According to the study, the structured training approach was successful in increasing knowledge about the prevention of peptic ulcers.

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