

Assessment of Knowledge Regarding Prevention of Peptic Ulcer among Adolescents in Selected College at Shimla, Himachal Pradesh, India

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Abstract

Introduction: Gastrointestinal system is the most essential system of the body which has got a relation with diet in turn helps in maintaining normal growth and development and normal functioning of the body.

Materials and Method: In order to achieve the objectives of the study, a descriptive study approach was adopted for the study. A closed ended questionnaire was used to assess the knowledge of adolescents on peptic ulcer and its prevention. Probability multi-stage sampling technique was appropriate to select 200 adolescents from a selected pre-university colleges of Shimla as the sample.

Results: The assessment of knowledge among adolescents regarding peptic ulcer and its prevention reveals that the highest percentage (47.5%) of the students had moderate level of knowledge regarding prevention of peptic ulcer, 18.5% of adolescents had good knowledge, 0.5% had excellent knowledge and 33.5% had poor knowledge regarding peptic ulcer. The overall knowledge on peptic ulcer and its preventive measures is 49.58% with mean and standard deviation 15.87 ± 4.082 . The area-wise analysis revealed that the adolescents scored highest in the area prevention of peptic ulcer (50.89%) with mean and standard deviation 4.58 ± 1.56 . Findings of the study revealed that knowledge among adolescents regarding prevention of peptic ulcer is moderate.

Conclusion: Prevention is always considered as better than cure, the identification and understanding of the risk factors is the important step of preventing peptic ulcer.

Keywords: *Knowledge, Adolescents, Information booklet*

Introduction

Adolescence is considered as the transitional stage of human development. It is fascinating period of life as well as period of great complexity. It is the time of movement towards independence.¹ Adolescents are very vulnerable to changes in lifestyle and easily get influenced by their peers and other mass media and communications. Now a day a lot of changes in the lifestyle can be seen in their health causing diseases like peptic ulcer, obesity etc. eating habit is another contributing factor for peptic ulcer as they prefer junk food and carbonated beverages rather than healthy diet.²

Gastrointestinal system is the most essential system of the body which has got a relation with diet in turn

helps in maintaining normal growth and development and normal functioning of the body. Gastric diseases are becoming very common, unless treated promptly and completely, they can cause problems throughout the life. There are many contributing factors which irritates the gastric mucosa and it adversely affects the health of the people even may cause death. The foci of nursing intervention are education; and modification of behavior to promote a healthy life style pattern.³

Materials and Method

The objectives of the study were to 1) Determine the existing knowledge among adolescents regarding prevention of peptic ulcer as measured by a close-ended structured questionnaire.2) find the association

between knowledge scores on prevention of peptic ulcer and selected demographic variables.3) develop and distribute information booklet regarding prevention of peptic ulcer. In order to achieve the objectives of the study, a descriptive study approach was adopted for the study. A closed ended questionnaire was used to assess the knowledge of adolescents on peptic ulcer and its prevention. Probability multi-stage sampling technique was appropriate to select 200 adolescents from a selected pre-university college of Shimla. In the first stage, simple random sampling method, i.e., lottery method was adopted for selecting the pre-university colleges. In the second stage, lottery method was used to select 200 subjects. The data collected were systematically tabulated to facilitate the data analysis. The collected data analyzed by using descriptive and inferential statistics.

Results

Part I: Description of demographic characteristics of the adolescents

The demographic characteristics showed that With regard to gender distribution of the samples 56% of the respondents were male and 44% of the respondents were female. The age distribution of the samples shows that most of the participants (61.5%) are from the age of 17, 29%.5% are of 16 years and 9% are of 18 years. Distribution of according to their area of residence revealed that (62.5%) are of urban area and remaining

(37.5%) are from rural area. Distribution of the sample with reference to diet pattern reveals that most of the (85.5%) are mixed diet type and the remaining (14.5%) are vegetarians.

Part II: Knowledge of adolescents regarding prevention of peptic ulcer.

Table 1: distribution of level of knowledge of adolescents
N = 200

Level of knowledge	Percentage range of score	Number of respondents	Percentage
Excellent	81 – 100	1	0.5
Good	61- 80	37	18.5
Moderate	41- 60	95	47.5
Poor	0 - 40	67	33.5

Table 1 show that the Assessment of level of knowledge of the adolescents shows that highest percentage (47.5%) of the students had moderate level of knowledge regarding prevention of peptic ulcer, 18.5% of adolescents had good knowledge, 0.5% had excellent knowledge and 33.5% had poor knowledge regarding peptic ulcer.

Table 2: Area-wise analysis of the knowledge scores

Table 2: Item wise distribution of correct responses of PU students regarding clinical features, diagnosis and management of peptic ulcer.

Sl No	Items	Number	Percen-tage
15	Peptic ulcer leads to dull cramping pain	95	47.5
16	Most of the peptic ulcer shows the symptoms except headache	67	33.5
17	Peptic ulcer causes bleeding when there is erosion of ulcer through blood vessels	103	51.5
18	In case of chronic peptic ulcer presence of blood in vomits is called hematemesis	81	40.5
19	Identification of peptic ulcer is mainly by signs and symptoms	91	45.5
20	Foundation of treatment for peptic ulcer drug therapy	101	50.5
21	Antacids are the drug which neutralizes the gastric acid	90	45
22	Dietary management of the peptic ulcer recommends balanced diet	94	47
23	Natural way of neutralizing gastric acid is by drinking adequate fluids	123	61.5

Table 2 shows that the Analysis of correct response of adolescents on clinical features , diagnosis and management of peptic ulcer reveals that the highest percentage 61.5% of adolescents had knowledge that “ natural way of neutralizing gastric acid is by drinking adequate fluids.” 33.5% of adolescents were aware that

Most of the peptic ulcer shows the symptoms except headache”.

Part III: Association of knowledge of adolescents on prevention of peptic ulcer with selected demographic variables

N=200

Table 3. Knowledge of adolescents on prevention of peptic ulcer with selected demographic variables

Demographic variables	Df	χ^2	P value	Inference
Gender	2	1.009	p>0.05	NS
Age	2	3.062	p>0.05	NS
Area of residence	1	1.827	p>0.05	NS
Dietary pattern	1	1.391	p>0.05	NS
Activity after college hour	2	6.20	p>0.05	NS

S = Significant; NS = Not Significant

The data provided in Table 3 shows that there was significant association between the knowledge scores and demographic variables.

Discussion

Part I ; Demographic characteristics of the study

Fifty six percent (56%) of the sample were male and forty four percent (44%) were female. Highest percentage (61%) of students was in the age group of 17 years. Majority (62.5%) of the adolescents were from urban area. Majority (85.5%) of the adolescents taking mixed diet. Most (46%) of the adolescents were having indoor games as activity after college. Majority (89%) of adolescents are not having any family history of peptic ulcer. Most (82%) did not have previous information regarding prevention of peptic ulcer. Majority (69.2%) of the adolescents received information from academic education.

Findings of the study is supported by a study conducted in japan , the findings reveals that majority of sample were male (62%). Majority of sample were taking mixed diet (78%).⁴

Part II : Level of knowledge of adolescents regarding prevention of peptic ulcer

Majority (47.5%) of the adolescents had average knowledge regarding prevention of peptic ulcer.18.5% had good knowledge ,0.5% of the sample had excellent knowledge and 33.5% of the sample had poor knowledge on peptic ulcer.

Area-wise analysis of the knowledge scores

The overall knowledge on peptic ulcer and its preventive measures is 49.58% with mean and standard deviation 15.87 ± 4.082 . The area-wise analysis revealed that the adolescents scored highest in the area prevention of peptic ulcer(50.89%)with mean and standard deviation 4.58 ± 1.56 . the mean percentage in the area concept and cause is 50.43% and signs and symptoms, diagnosis and management is 46.945%. These findings are consistent with the findings of Bujanda in Span.⁵

Item wise analysis of the knowledge score.

Analysis of correct response of adolescents on concept, cause and risk factors of peptic ulcer reveals that the highest percentage 68% of adolescents had knowledge that “peptic ulcer develops in the presence of acidic environment”. 37% of adolescents were aware that “Gastrointestinal system is normally protected by mucosal barrier.” Analysis of correct response of adolescents on clinical features, diagnosis and management of peptic ulcer reveals that the highest percentage 61.5% of adolescents had knowledge that

“natural way of neutralizing gastric acid is by drinking adequate fluids.” 33.5% of adolescents were aware that “Most of the peptic ulcer shows the symptoms except headache”. Analysis of correct response of adolescents on prevention of peptic ulcer reveals that the highest percentage 63% of adolescents had knowledge that “food has to be taken at regular times”. 42% of adolescents were aware that “Milk is avoided in peptic ulcer because it stimulates gastric acid production”. The findings are similar to the study by Ko YC, Chiou YY in 2004. ⁶

Part III : Association of knowledge score of adolescents with selected demographic variables

There is no significant association between the knowledge score and the demographic variables. The null hypothesis was rejected.

Conclusion

The assessment of knowledge among adolescents regarding peptic ulcer and its prevention reveals that the highest percentage (47.5%) of the students had moderate level of knowledge regarding prevention of peptic ulcer, 18.5% of adolescents had good knowledge, 0.5% had excellent knowledge and 33.5% had poor knowledge regarding peptic ulcer. The present health care system focuses on primary prevention and in order to achieve primary prevention it is important to understand the existing knowledge of people at risk. There are number of risk factors identified which are contributing to the development of peptic ulcer. The lifestyle changes in adolescents like junk food, changes in eating habits and time more of stressful life are considered as important risk factor of peptic ulcer in adolescents.

Conflict of Interest: Nil

Source of Funding: Self

Ethical Clearance: Taken from the college of nursing ethical committee.

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