A STUDY TO ASSESS THE KNOWLEDGE REGARDING STOMACH CANCER AMONG ADULTS IN A SELECTED COMMUNITY AT KOLLAM

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ABSTRACT

Introduction:

Stomach cancer is also known as gastric cancer. Gastric cancer affects the whole digestive system, which includes the mouth, pharynx, esophagus, esophagus, stomach, small intestine, large intestine, rectum, anus. One of the most common risk factors is infection with chronic H Pylori bacterial infection. This is the common bacteria which causes gastritis and gastric ulcer. The infection can lead to persistent inflammation in the stomach, increasing the risk of gastric cancer. Apart from H Pylori bacterial infection, smoking and alcohol consumption are some other risk factors of gastric cancer. Dietary factors are also one of the main causes of gastric cancer. Since cancer is associated a lot with the digestive system, food intake plays a very vital role. Red and processed meat, salty food and a high intake of pickled vegetables are known to increase the risk of gastric cancer.¹

Materials and methods:

Quantitative approach with descriptive Non-experimental research design was used in this study. The study was conducted in a selected Community at Kollam, Kerala. The target population was adults in selected community. The Non-probability convenient sampling technique was used to collect data. Formal permission was taken by institutional ethics committee and consent taken from adults in selected community at Kollam and data were collected through a knowledge questionnaire. The tool which consisted of Demographic Proforma and knowledge related to Stomach cancer (general knowledge, causes, signs and symptoms, diagnostic measures, treatment, and its management). The data were analyzed using descriptive and inferential statistics.
Result:
The study revealed that 46% of the adults had poor knowledge, 50% had moderate knowledge, 4% had good knowledge. Significant association was found between knowledge and demographic variables like diet and source of information at 0.05 level of significance.

Conclusion: Stomach cancer is the fourth most common cancer in men and seventh most common cancer in women in India. The study found that 46% of the adults had poor knowledge, 50% had moderate knowledge, 4% had good knowledge regarding stomach cancer among 100 participants.

Keywords: Assess, knowledge, stomach cancer and adults

INTRODUCTION

Stomach cancer is also known as gastric cancer. Gastric cancer affects the whole digestive system, which includes the mouth, pharynx, esophagus, stomach, small intestine, large intestine, rectum, and anus. One of the most common risk factors is infection with chronic H. Pylori bacterial infection. This is the common bacteria which causes gastritis and gastric ulcer. The infection can lead to persistent inflammation in the stomach, increasing the risk of gastric cancer. Apart from H. Pylori bacterial infection, smoking and alcohol consumption are some other risk factors of gastric cancer. Dietary factors are also one of the main causes of gastric cancer. Since cancer is associated a lot with the digestive system, food intake plays a very vital role. Red and processed meat, salty food, and a high intake of pickled vegetables are known to increase the risk of gastric cancer.1

Most cases of stomach cancers are gastric carcinomas, which can be divided into a number of subtypes, including gastric adenocarcinomas. Lymphomas and mesenchymal tumors may also develop in the stomach. Early symptoms may include heartburn, upper abdominal pain, nausea and loss of appetite. Later signs and symptoms may include weight loss, yellowing of the skin and eyes, vomiting, difficulty swallowing, and blood in the stool, etc. The cancer may spread from the stomach to other parts of the body, particularly the liver, lungs, bones, lining of the abdomen, and lymph nodes.2

The most common cause is infection by the bacterium Helicobacter pylori, which accounts for more than 60% of cases. Certain types of H. pylori have greater risks than others. Smoking, dietary factors such as pickled vegetables and obesity are other risk factors. About 10% of cases run in families and between 1% and 3% of cases are due to inherited genetic syndromes. Most of the time, stomach cancer develops in stages over years. Diagnosis is usually by biopsy done during endoscopy.2

A Mediterranean diet lowers the risk of stomach cancer, as does the stopping of smoking. Tentative evidence indicates that treating H. pylori decreases the future risk. If stomach cancer is treated early, it can be cured. Treatments may include some combination of surgery, chemotherapy, radiation therapy and targeted therapy as an option as well. If treated late, palliative care may be advised. Some types of lymphoma can be cured by eliminating H. pylori. Outcomes are often poor, with a less than 10% five-year survival rate in the Western world for advanced cases. In the United States, five-year survival is 31.5%, while in South Korea it is over 65%, and Japan over 70%, partly due to screening efforts.2

OBJECTIVES

- To assess the knowledge regarding stomach cancer among adults in a selected community at Kollam.
- To find out association between the knowledge regarding stomach cancer among adults and selected demographic variables.
MATERIALS AND METHODS

Approach: quantitative approach

Design: Non experimental descriptive research design

Population: Adults in selected community at Kollam

Sample: Adults between the age of 20-60 years in selected community at Kollam

Sampling technique: Non-probability convenient sampling technique

Setting: Community area, Kollam

Data collection method: self-structured questionnaire

Inclusion criteria.

a. Adults who are in the age group between 20-60 years
b. Adults who are able to read and write Malayalam
c. Adults who are willing to participate

Exclusion criteria

a. Adults who are absent at the time of data collection process
b. Adults who are diagnosed with stomach cancer

Data collection process:

We communicated the purpose and significance of the study with the participants through direct communication. Data were collected through self-structured questionnaire.

Ethical approval and informed consent

Ethical Clearance and approval was obtained from the Institutional Ethics Committee of Bishop Benziger College of Nursing, Kollam and obtained legal permission from the Medical officer of the community health center Pallithottam and also informed consent was obtained from the participants. The respondents were assured the anonymity and confidentiality of the information provided by them. The privacy of the research participants was maintained. The ethical principles in research which included beneficence, justice, maleficence, honesty, confidentiality and non-discrimination was strictly followed in the study. The participants were given the right to withdraw from the research study at any time.

Tool

Section A

Demographic proforma

Section A consisted of information regarding demographic variables such as age, sex, family income, diet, habit, education, occupation and source of information of adults in selected community at Kollam.
Section B

Self structured knowledge questionnaire

Reliability:

Reliability is concerned with the degree of consistency or accuracy with which an instrument measures that attribute it is designed to measure. After obtaining legal permission from the medical officer of the community health center Pallithottam, the tool was administered to 10 adults between the age group of 20-60 years. Reliability coefficient was calculated using Karl Pearson correlation coefficient method. The reliability coefficient of tool was 0.84. This indicates that the tool was reliable.

Analysis

Descriptive analysis

1. Percentage distribution of sample as per demographic variables

2. Level of knowledge regarding Stomach cancer among adults in selected community at Kollam.

Inferential analysis

1. Association between level of knowledge and selected demographic variables using Chi Square test.

Percentage distribution of the sample according to age

<table>
<thead>
<tr>
<th>AGE</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>32%</td>
</tr>
<tr>
<td>31-40</td>
<td>13%</td>
</tr>
<tr>
<td>41-50</td>
<td>21%</td>
</tr>
<tr>
<td>51-60</td>
<td>34%</td>
</tr>
</tbody>
</table>

Fig(1) showing percentage wise distribution of the sample according to age.

The pie diagram shows that out of 100 sample, 32% were in the age group of 20-30 years and 13% were in the age group of 31-40 years, 21% were in the age group of 41-50 years and 34% were in the age group of 51-60 years.
Percentage distribution of the sample according to sex

N=100

Fig(2) showing percentage wise distribution of the sample according to sex.

The pie diagram shows that out of 100 sample, 66% were males, 34% were females.

Percentagewise distribution of sample according to family income

N=100

Fig(3) showing percentage wise distribution of the sample according to family income.

The pie diagram shows that out of 100 sample, 88% had an income below Rs.10000, 10% had an income between Rs.10000-30000, 2% had an income between 30001-50000.

Percentagewise distribution of sample according to diet

N=100

Fig(4) showing percentage wise distribution of the sample according to diet.

The pie diagram shows shows that out of 100 sample, 97% were Non vegetarians and 3% were vegetarians.
Percentage wise distribution of sample according to habits

N=100

Fig(5) showing percentage wise distribution of the sample according to diet.
The pie diagram shows that out of 100 sample, 7% had the habit of smoking, 67% had the habit of alcoholism, 8% had both, 18% had no bad habits.

Percentage wise distribution of sample according to educational status

N=100

Fig(6) showing percentage wise distribution of the sample according to educational status.
The pie diagram shows that out of 100 sample, 31% had primary education, 37% had secondary education, 10% had higher secondary education, and 22% were graduates or above.

Percentage wise distribution of sample according to occupational status

N=100

Fig(7) showing percentage wise distribution of the sample according to occupational status.
The pie diagram shows that out of 100 sample, 46% work in private sector, 23% had other job, 31% had no job.
Percentage wise distribution of sample according to source of information

N=100

SOURCE OF INFORMATION

- Books: 10%
- Social media: 10%
- Cinema: 15%
- Relatives: 65%

Fig(8) showing percentage wise distribution of the sample according to diet.

The pie diagram shows that out of 100 sample, 10% had source of information from books, 10% had source of information from social media, 15% had source of information from cinema and 65% had source of information from relatives.

Level knowledge regarding stomach cancer among adults in a selected community at Kollam

<table>
<thead>
<tr>
<th>Score</th>
<th>Range</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-8</td>
<td>poor</td>
<td>46</td>
<td>46%</td>
</tr>
<tr>
<td>9-16</td>
<td>moderate</td>
<td>50</td>
<td>50%</td>
</tr>
<tr>
<td>17-25</td>
<td>good</td>
<td>4</td>
<td>4%</td>
</tr>
</tbody>
</table>

The data presented on table 1 shows that 46% of the adults had poor knowledge, 50% had moderate knowledge, 4% had good knowledge.

Association between knowledge regarding stomach cancer and selected demographic variable.

<table>
<thead>
<tr>
<th>Sl no</th>
<th>Socio demographic variables</th>
<th>Poor</th>
<th>Moderate</th>
<th>Good</th>
<th>Df</th>
<th>Chi Square test</th>
<th>Table value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20-30yrs</td>
<td>9</td>
<td>21</td>
<td>2</td>
<td>6</td>
<td>7.89</td>
<td>12.59</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>31-40yrs</td>
<td>8</td>
<td>5</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>41-50yrs</td>
<td>11</td>
<td>10</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>51-60yrs</td>
<td>18</td>
<td>14</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>25</td>
<td>38</td>
<td>3</td>
<td>4</td>
<td>5.11</td>
<td>9.48</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>21</td>
<td>12</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Monthly Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Below 10000</td>
<td>40</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>5.90</td>
<td>12.59</td>
<td>NS</td>
</tr>
</tbody>
</table>
The findings of the present study revealed that there was no significant association between knowledge and selected demographic variables like age, sex, family income, habit, education, occupation, and there was significant association between knowledge and selected demographic variables like diet and source of information.

RESULTS

The study was conducted in adults among selected community Pallithottam, Kollam. The demographic data revealed that 32% of the sample were under the age group of 20-30 years, 13% sample were under the age group of 31-40 years, 21% sample were under the age group of 41-50 years, 34% sample were under the age group of 51-60 years. Regarding sex, 66% belonged to male, 34% belonged to female. Most of them (88%) had family income below Rs.10,000, 10% had an income between Rs.10,000-30,000, 2% had an income between Rs.30,001-50,000. Most of the adults were non-vegetarians (97%), 3% adults were vegetarians. Regarding habit, it was found that 7% had smoking, 67% had alcoholism, 8% had both alcoholism and smoking, 18% had none of these. 31% of adults had primary education, 37% of adults had secondary education, 10% of adults had higher secondary education and 22% of adults were graduated or had higher qualification. 46% worked in private sector, 23% of adults worked in other sectors, 31% of adults were jobless and no one (0%) had work in government sector. Regarding source of information, 10% sample had source of
information from books, 10% had source of information from social media, 15% had source of information from cinemas and 65% had source of information from relatives regarding stomach cancer. The study revealed that 46% of the adults had poor knowledge, 50% had moderate knowledge, 4% had good knowledge. The association found by using the Chi Square test inferred that the present study showed a significant association between knowledge and demographic variables like diet and source of information calculated values were greater than table value at 0.05 level of significance). There was no association between knowledge and demographic variables like age, sex, family income, habit, education, occupation. (calculated values were less than table value at 0.05 level of significance).

DISCUSSION

Discussion of findings with other studies based on objectives;

• To assess the knowledge regarding stomach cancer among adults in selected community area at Kollam.

The study revealed that 46% of adults had poor knowledge, 50% of adults had moderate knowledge, and 4% of adults had good knowledge regarding stomach cancer.

The findings were consistent with another cross-sectional conducted to assess the level of knowledge regarding risk factors, warning symptoms and screening attitude of gastric cancer with sample selected by convenient sampling technique. Data for this descriptive cross-sectional study were collected from the general population in Makkah via an electronic self-administered questionnaire. A total 400 participants were enrolled in the study. The result of the study showed that, 78 (19.5%), 263 (65.8%) and 59 (14.7%) had respectively low, moderate and high levels of knowledge about the risk factors and warning symptoms of stomach cancer. The study concluded that good levels of knowledge about the risk factors and warning symptoms of stomach cancer were recorded to be moderate in most of the population in Makkah.3

• To find out the association between the knowledge regarding stomach cancer among adults and selected demographic variable such as age, sex, family income, diet, habit, educational status, occupational status and source of information.

The findings of the present study revealed that there was no significant association between knowledge and selected demographic variables like age, sex, family income, habit, education, occupation, and there was significant association between knowledge and selected demographic variables like diet and source of information.

The findings were consistent with another case-control study of dietary factors and gastric cancer was conducted between September 1986 and March 1989 in the Barcelona metropolitan area, Spain. The results showed that Gastric cancer risk rose with increasing intake of smoked and pickled foods (3.67 for upper quartile) and salt (2.11 for upper quartile). Intake of citrus fruits (0.47 for upper fertile) and raw-green vegetables (0.56 for upper quartile) appeared to be protective. Gastric cancer risk was not associated with intake of cereals, rice, total vegetables, and fruits as a whole.4

CONCLUSION

Reduction of gastric cancer mortality can be achieved by implementation of prevention programmes and personalised treatment. Effective prevention strategies should be based on specific risk profiles, including H pylori genotype, host gene polymorphisms, and environmental factors. The study revealed that 46% of the adults had poor knowledge, 50% had moderate knowledge, 4% had good knowledge. The association found by using the Chi Square test inferred that the present study showed a significant association between knowledge and demographic variables like diet and source of information.
ACKNOWLEDGEMENT
We are thankful to the principal of the college for conducting the study. This study has been done under the guidance, support, and encouragement of our guide Mrs. Sherin Sebastin Assistant professor, medical surgical department. Without her inspiration and valuable suggestions, this study would have been an incomplete work. We would like to thank the institutional ethics committee for considering this topic. Special thanks to Dr. Sindha Mendez who helped in research work and finalized the publication process.

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Nil

Conflict of interest
There are no conflicts of interest

REFERENCE