"A COMPARATIVE STUDY TO ASSESS THE KNOWLEDGE ON GASTRITIS AMONG MALE AND FEMALE UNDERGRADUATES IN SELECTED AREAS OF CHITTOOR".

**Dr. M. Sreelatha, *Rajamanikyam Sushma, Dr. P. Sudha Rani

1. ****Associate professor, Department of Community Health Nursing, College of Nursing, Sri Venkateshwara Institute of Medical Sciences, Tirupathi-517507, Chittoor- Dist, Andhra Pradesh, India.**

2. ***M.SC Nursing, Department of Community Health Nursing, College of Nursing, Sri Venkateshwara Institute of Medical Sciences, Tirupathi.**

3. **Professor I/C Principal, College of Nursing, Sri Venkateshwara Institute Of Medical Sciences, Tirupathi-517507, Chittoor- Dist, Andhra Pradesh, India.**

ABSTRACT:

INTRODUCTION: A change in one aspect of a person's life brings about change in every aspect of his or her being and alters the quality of the whole. Gastrointestinal system is one of the systems of our body which has a relation with diet. Upper gastrointestinal inflammatory process is exceedingly common and has a wide spectrum of cause and manifestation. Gastritis disorder are common; unless treated promptly and completely, they can continue to cause problems throughout the person's life. Clients need assistance to learn a new way of eating in order to achieve and maintain health and to make necessary lifestyle changes. **METHODOLOGY:** Non- Experimental approach was adopted to achieve the objectives of the study, which was felt to be most appropriate for its practicability in real life situation. It has the advantages of practicability, feasibility and to a certain extent for generalization. Research design was descriptive research design. The study was conducted in selected areas of Chittoor. Population includes Male and Female undergraduates in selected areas of Chittoor. Sample size consists of 100 undergraduates (50 Male & 50 Females) under inclusion criteria. Non probability convenient sampling technique was adopted for the present study based on inclusion criteria. **RESULTS:** Out of 100 samples 50 male undergraduates i.e majority 28(56.00%) were having adequate knowledge, 17(34%) were having moderate knowledge and 5(10.00%) were having inadequate knowledge on gastritis. In 50 female undergraduates 40(80.00%) were

having adequate knowledge, 8(16.00%) were having moderate knowledge and 2(4.00%) were having inadequate knowledge on gastritis. Male sample mean was 32.14 and standard deviation was 6.468 were as female sample mean was 36.48 and standard deviation was 5.733, t-value was 3.551 significant at p<0.001 level. Hence H_{01} was rejected. There was association between level of knowledge on gastritis among male undergraduates with their selected socio-demographic variables like Age in years, occupation of the mother significant at <0.005 level and standard of the study was significant at 0.001 level. Hence H_{02} was rejected. And some of the variables has not shown significance such as religion, education of the mother, education of the father, occupation father, family income per month, residence, dietary pattern, previous knowledge and source of information. Association between level of knowledge on gastritis among female undergraduates with their selected socio-demographic variables like Age in years, occupation of the father, family income per month significant at 0.001 level and residence significant at 0.005 level. Hence H_{02} was rejected. And some of the variables has not shown significance such as religion, standard of study, education of mother, education of father, occupation of the mother, dietary pattern, previous knowledge and source of information. **CONCLUSION:** Out of 100 sample majority of the sample were having adequate knowledge on gastritis female were having adequate knowledge in comparison with male undergraduates. The demographic variables such as Age, Gender, Educational status of mother and father, occupational status of mother and father, monthly family income, previous knowledge and source of information were associated with their knowledge on gastritis. Information booklet was given for their further reference to enhance their knowledge levels and it may help to prevent the disease.

Key words: Gastritis, Undergraduates, selected Areas.

INTRODUCTION:

Gastritis is one of the most common gastrointestinal disorder characterized by irritation of the stomach lining (mucosa). The condition often causes abdominal pain and tenderness, nausea, and vomiting. The gastro intestinal system provides the body with adequate and continuous amount of nutrients from ingested food. Disorders of gastro intestinal functions interfere with normal maintenance of health.

It is a common medical problem among young adults due to certain factors like lifestyle, food pattern, stress, personal habits also infection of the stomach mucosa with H. pylori etc. Student life is golden life, is a time of critical growth since most of them are in the period of adolescents or adulthood. Adolescents are a particular nutritional risk because as they away from home to pursue their higher education. The peer group influences the unhealthy life styles and unhealthy dietary management tend to put the category at most risk. To avoid the being the part of this statistics the best solution is the appropriate preventive measures goes hand in hand with properly planned management such as life style modification, dietary management as well as medical management.The condition is diagnosed in as many as 10% of patients seeking emergency medical help for abdominal pain. It is estimated that around 1,225,614 Indians have gastritis and stands fourth position among the southern Asia countries as per the current statistics. Therefore, the student nurses must have a thorough knowledge about gastritis so as to prevent the progression of gastritis first of all among

themselves and also educate the society to prevent the development and progression of gastritis. It includes risk factors like drugs such as aspirin, non-steroidal anti-inflammatory drugs (NSAIDS).

NEED FOR THE STUDY:

The prevalence of H.pylori infection was 50% on global scale but huge geographical variations exists. In a study conducted by Sethi et al from Canada, the prevalence of H.pylori infection was found to be 37.9%, based on histologic findings. In contrast a study conducted from rural Mexico, the sero-prevalence was found to be 52.2%.Study from Eastern Europe revealed 39.8% prevalence in Cyprotic patients and PCR was the tool used for the diagnosis of infection. In Western Europe, two different studies provided minimal and maximal sero-prevalence of H.pylori infection. The minimal sero-prevalence was 31.7% from Netherlands whereas maximal was 84.2% from Portuguese. The prevalence of H.pylori infection in Africa was found to be high; in Nigeria, the prevalence in dyspeptic patients was found to 93.6% by serology and 80% by histology. In Morocco, it was 75.5% by histology, 65.7% seroprevalence in Gondar, Ethiopia.[8] In Asia, the prevalence of H.pylori infection scales from 54% to 76%. In China the prevalence of H.pylori infection among the healthy individuals was found to be 63.4%. The prevalence in Bhutan was obtained from the two different studies conducted among volunteers and dyspeptic patients, it was 73.4% and 86% respectively. In asymptomatic dyspeptic patients of Kazakstan, the sero-prevalence was 65.7%. A cross-sectional nationwide multicentre study survey revealed the sero-prevalence of 54.4% in Korea. Among the healthy individuals of Saudi Arabia the seroprevalence was 28.3%.   The statistical rate showing about 50% of the world population is suffering with gastritis i.e, 2.7 million people. Hence the prevention and management of gastritis plays an important role among the younger population. The incidence of gastritis in India is approximately 3 in 869 that is about 12,25,614 people suffering from gastritis out of the total 1,06,50,70,607 population. Gastritis is a common medical problem. Up to 10% of people who come to a hospital emergency department with an abdominal pain, have gastritis. A total of 264 children were included in a study conducted by Rajaram et al in Tirupathi Andhra Pradesh. The study was intended to know the seroprevalence of H.pylori in children attending the paediatric department of S.V.R.R.G.G Hospital. Blood samples were collected from children in the age group of 2-12 years and detected for IgG antibody by ELISA. The overall seroprevalence was 44.31%.

MATERIALS AND METHODS:

RESEARCH APPROACH

The research approach adopted was non- experimental approach. This approach was considered most appropriate as the study was focused to assess the knowledge on gastritis among undergraduates in selected areas of Chittoor.

RESEARCH DESIGN

The research design used for the study was descriptive research design to achieve the objectives of the study.

VARIABLES OF THE STUDY

Independent Variable: in this study age, gender, religion, standard of the study, education of mother, education of father, occupation of mother, occupation of mother, family income per month, residence, dietary pattern, previous knowledge and source of information.

Dependent variable: In this study knowledge of undergraduates on gastritis was dependent variable.

SETTING OF THE STUDY

The study was conducted in Chittoor. Here nearly thousands of people living in Chittoor. Here number of undergraduate students are present.

This study was conducted in chittoor. In Chittoor am selected three areas for the study. The areas are Jainagar colony, Durga nagar colony and Ram nagar colony.

POPULATION

The population of this study consists of undergraduate students who are residing in Chittoor.

SAMPLE:

The sample for the present study comprised that students residing at Chittoor.

SAMPLE SIZE

The sample consists of 100 undergraduate 50 male and 50 female students and fulfil the inclusive criteria during the study period.

SAMPLING TECHNIQUE

Non probability convenient sampling technique was adopted for the present study based on inclusion criteria

CRITERIA FOR SAMPLE SELECTION

i.   Inclusion Criteria

Undergraduates who are

- Residing selected areas.
- Able to communicate Telugu and English .
- Who are willing to participate in the study.
- Having age between 16 – 19 years.
- Available at the time of data collection.

ii.   Exclusion criteria

Undergraduates who are

- medical students.
- selected for pilot study and reliability.
- Other than selected areas.

DEVELOPMENT AND DESCRIPTION OF TOOL

The tool was developed with the help of related literature from journals, websites, discussion and guidance from the experts in the field of nursing and medicine.

The tool consists of two sections:

Section – 1: consist of socio-demographic data.

Section – 2: Questionnaire consists of 26 questions to assess the level of knowledge on gastritis among undergraduates.

Scoring interpretation: scoring key was prepared for

Section-1: consists of demographic variables.

Section – 2: Each question has minimum 3 options and for some questions more than 3 options. Each right carries '1' mark, each wrong answer carries '0'. Total score was – 42.

Adequate knowledge - >75%   (32-42)

Moderate knowledge - >51 – 75%   (22-31)

Inadequate knowledge - <50%   (<21)

CONTENT VALIDITY

Content validity was obtained for the questionnaire from 10 experts: 7 in the field of community medicine, 6 in the field of nursing and modifications were made and the tool was finalized and incorporated in the study.

RELIABILITY OF THE TOOL

The reliability of the instrument was established by administering the tool to 10 undergraduates 5 boys and 5 girls residing at Durga nagar colony, Chittoor. Who were not included in the pilot study and who fulfilled the inclusion criteria. The reliability was established by Guttman split-half formula and Cronbaches alpha reliability method. The tool was reliable with the score of $r = 0.8522$. the test was conducted on 08-06-2020.

PILOT STUDY

Pilot study was conducted in Ram Nagar colony, Chittoor. Prior consent was obtained from sample family members, Chittoor for conducting the study. 10 undergraduates who fulfilled the inclusion criteria were selected by convenient sampling technique. Rapport was established with self-introduction to the undergraduates and a written consent was obtained from the participants to participate in the study.

Investigator collected the data by self-administered questionnaire and information booklet given on 14-06-2020.

Statistical analysis was done by using descriptive and inferential statistics. The findings of the study revealed that the tool was reliable and feasible to conduct the study.

PROCEDURE FOR DATA COLLECTION

Final permission was obtained from the authority to conduct the study at jainagar colony, Chittoor.

The investigator initially established rapport with the study subjects and explained the purpose of the study. Consent from the subjects was obtained and confidentiality was maintained throughout the study.

The investigator collected the data by self-administered questionnaire, given multiple choice questions to the sample and sample were kept their responses in the given brackets.
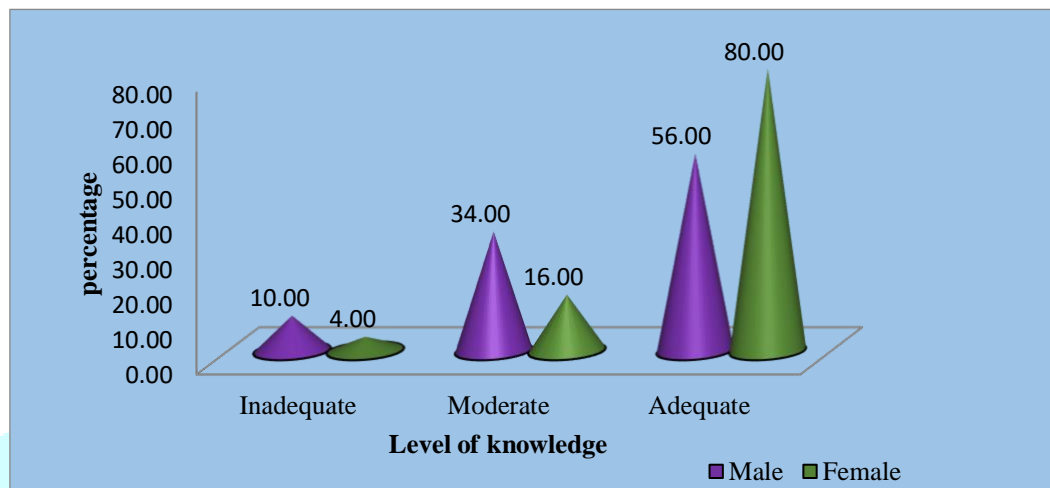
The data collection took 15 – 20 minutes for completion from each participant. After the completion of data collection, information booklet was given to all participants for future references, dualy thanking the participants for their willingness and co-operation. The same procedure was followed for all 100 samples.

Total duration of data collection was 8 days. The schedule adopted was given below

DATE	TIME	NUMBER OF SAMPLES PER DAY	DURATION OF DATA COLLECTION
16-06-2020	9am-1pm	12	4hours
17-06-2020	9am-1pm	12	4hours
18-06-2020	9am-1pm	12	4hours
19-06-2020	9am-1pm	12	4hours
20-06-2020	9am-1pm	12	4hours
21-06-2020	9am-1pm	12	4hours
22-06-2020	9am-1pm	14	4hours
23-06-2020	9am-1pm	14	4hours

RESULTS:

- Out of 100 samples 50 male undergraduates i.e majority 28(56.00%) were having adequate knowledge, 17(34%) were having moderate knowledge and 5(10.00%) were having inadequate knowledge on gastritis.

- In 50 female undergraduates 40(80.00%) were having adequate knowledge, 8(16.00%) were having moderate knowledge and 2(4.00%) were having inadequate knowledge on gastritis.

- Male sample mean was 32.14 and standard deviation was 6.468 were as female sample mean was 36.48 and standard deviation was 5.733, t-value was 3.551 significant at $p<0.001$ level. Hence H_{01} was rejected.

- There was association between level of knowledge on gastritis among male undergraduates with their selected socio-demographic variables like Age in years, occupation of the mother significant at <0.005 level and standard of the study was significant at 0.001 level. Hence H_{02} was rejected. And some of the variables has not shown significance such as religion, education of the mother, education of the father, occupation father, family income per month, residence, dietary pattern, previous knowledge and source of information.

- Association between level of knowledge on gastritis among female undergraduates with their selected socio-demographic variables like Age in years, occupation of the father, family income per month significant at 0.001 level and residence significant at 0.005 level. Hence H_{02} was rejected. And some of the variables has not shown significance such as religion, standard of study, education of mother, education of father, occupation of the mother, dietary pattern, previous knowledge and source of information.

DISCUSSION:

The discussion of the present study is based on the findings obtained from the descriptive statistical analysis of the collected data.

1. **The first objective of the study was to assess the knowledge on gastritis among male and female undergraduates.**

    The present study Out of 100 samples 50 male undergraduates i.e majority 28(56.00%) were having adequate knowledge, 17(34%) were having moderate knowledge and 5(10.00%) were having inadequate knowledge on gastritis. And 50 female undergraduates 40(80.00%) were having adequate knowledge, 8(16.00%) were having moderate knowledge and 2(4.00%) were having inadequate knowledge on gastritis.

2. **To compare the level of knowledge on gastritis among male and female undergraduate students.**

    The present study revealed that, Male sample mean was 32.14 and standard deviation was 6.468 were as female sample mean was 36.48 and standard deviation was 5.733, t-value was 3.551 significant at $p<0.001$ level. Hence H_{01} was rejected.

3. **To find the association between knowledge on gastritis among male and female undergraduates with their selected socio demographic variables.**

   ➤ The study showed that there was association between level of knowledge on gastritis among male undergraduates with their selected socio-demographic variables like age in years, occupation of the mother significant at <0.005 level and standard of study was significant at 0.001 level and some of the variables has not shown significance such as religion, education of the mother and father, occupation of father, family income per income, residence, dietary pattern, previous knowledge and source of information. Hence H_{02} was rejected.

   ➤ There was association between level of knowledge on gastritis among female undergraduates with their selected socio-demographic variables like age in years, occupation of the father, family income per month significant at 0.001 level and residence significant at 0.005 level and some of the variables has not shown significance such as religion, standard of study, education of mother, education of father, occupational of the mother, dietary pattern, previous knowledge and source of information. H_{02} was rejected.

CONCLUSION:

   ✦ Out of 100 sample majority of the sample were having adequate knowledge on gastritis female were having adequate knowledge in comparison with male undergraduates.

   ✦ The demographic variables such as Age, Gender, Educational status of mother and father, occupational status of mother and father, monthly family income, previous knowledge and source of information were associated with their knowledge on gastritis.

   ✦ Information booklet was given for their further reference to enhance their knowledge levels and it may help to prevent the disease.

ACKNOWLEDGEMENT

REFERRENCES:

1. **K.PARK,** "textbook of social and preventive medicine" 21st edition, bhanot publications, New Delhi, pg.no.

2. **Brunner & Suddarth`s,** (2009) A Textbook of Medical Surgical Nursing, Eleventh edition, Wolters Kluwer, Lipinncott Williams & Wilkins, Philadelphia, 2:2186-2200.

3. **Lewis S**. (2006) A Textbook of Medical surgical nursing. 6th ed. Philadelphia: Mosby Publications.

4. **Joyce M Black,** (2005) A Textbook of "Medical Surgical Nursing", 7th edition, Elsevier publications, New Delhi, Pp; 747-748.

5. **Melanie Nicole Weck and Hermann Brenner**, 2006 "Prevalence of Chronic Atrophic Gastritis in Different Parts of the World", Cancer Epidemiol Biomarkers Prev 2006, vol 15(6).

6. **Shafer's,** 2007 Medical and surgical nursing, seventh edition, Phipps publications.

7. **Luckmann and sorensen's**," a textbook of medical surgical nursing", 4th edition , Jacobs publication, New Delhi, pg.no

8. **P.K, Bardhan**. Epidemiological features of Helicobacter pylori infection in developing countries. Clinical infectious diseases. 1997 November ; 25(5): 973-8. 46. Cullen .D .J .E , Collins .B. J, Christiansen .K .J, Epis .J, Warren .J .R, Surveyor .I, Cullen .K. J. When is Helicobacterpylori infection acquired. Gut. April 1993; 1681-1682.

9. **Eusebi .L. H, Zagari .R. M. and Bazzoli F.** Epidemiology of Helicobacter pylori Infection. Helicobacter. September 2014; 19(1): 1-5.

10. **Sethi .A, Chaudhuri .M, Kelly .L, Hopman .W**. Prevalence of Helicobacter pylori in a First Nations population in northwestern Ontario. Canadian Family Physician. 2013 April; 59(4): 182-7.

11. **Alvarado-Esquivel, Cosme.** Seroepidemiology of Helicobacter Pylori Infection in Pregnant Women in Rural Durango, Mexico. International Journal of Biomedical Science. 2013 December; 9(4): 224-229.

12. **Ozaydin.N, Turkyilmaz.S.A, Cali.S.** Prevalence and risk factors of helicobacter pylori in Turkey: a nationallyrepresentative, cross-sectional, screening with the 13CUrea breath test. BMC Public Health. 2013; 13: 1215.

13. **Krashias.G, Bashiardes.S, Potamitou.A, Potamitis .G.S, Christodoulou.C.** Prevalence of Helicobacter pylori cagA and vacA genes in Cypriot patients. Journal of infections in developing countries. 2013 September ; 7(9): 642-50.

14. **Van Blankenstein.M, van Vuuren.A.J, Looman.C.W, Ouwendijk.M, Kuipers.E.J.** The prevalence of helicobacter pylori infection in the Netherlands. Scandivian Journal of Gastroenerology. 2013 July; 48(7): 794-800.

15. **Bastos.J, Peleteiro.B, Barros.R, Alves.L, Severo.M, de Fátima Pina.M, Pinto.H, Carvalho.S, Marinho.A, Guimaraes.J.T, Azevedo.A, La Vecchia.C, Barros.H, Lunet.N.** Sociodemographic determinants of prevalence and incidence of Helicobacter pylori infection in Portuguese adults. Helicobacter. 2013 December; 18(6): 413-22.

16. **Olokoba.A.B, Gashau.W, Bwala.S, Adamu.A, and Salawu.F.K.** Helicobacter Pylori Infection in Nigerians with Dyspepsia. Ghana Medical Journal. 2013 June; 47(2): 79-81.

17. **Benajah.D.A, Lahbabi.M, Alaoui.S, El Rhazi.K, El Abkari.M, Nejjari.C, Amarti.A, Bennani.B, Mahmoud.M, Ibrahimi.S.A.** Prevalence of Helicobacter pylori and its recurrence after successful eradication in a developing nation (Morocco). Clinics and research in hepatology and gastroenterology. 2013 November; 37(5): 519-26.

18. **Mathewos.B, Moges.B and Dagnew.M**. Seroprevalence and trend of Helicobacter pylori infection in Gondar University Hospital among dyspeptic patients, Gondar, North West Ethiopia." BMC Research Notes 6 (August 2013): 346.

19. **Zhu .Y, Zhou .X, Wu .J, Su .J, Zhang .G.** "Risk Factors and Prevalence of Helicobacter pylori Infection in Persistent High Incidence Area of Gastric Carcinoma in Yangzhong City. Gastroenterology Research and Practice. 2014; 2014: 1-10.

20. **Ratha-korn Vilaichone, Mahachai .V, Shiota.S, Uchida.T, Ratanachu**-ek.T, Tshering.L, Tung, N.L, Fujioka.T, Moriyama.M, and Yamaoka.Y. Extremely high prevalence of Helicobacter pylori infection in Bhutan. World Journal of Gastroenteroogy. 2013 May; 19(18): 2806-2810.

21. **Dendup.T, Richter.J.M, Yamaoka.Y, Kinley Wangchuk, and Hoda M Malaty**. Geographical distribution of the incidence of gastric cancer in Bhutan. World Journal of Gastroenterology. 2015 October; 21(38): 10883-10889.

22. **Benberin.V, Bektayeva.R, Karabayeva.R, Lebedev.A, Akemeyeva.K, Paloheimo.L, Syrjänen.K**. Prevalence of H. pylori infection and atrophic gastritis among symptomatic and dyspeptic adults in Kazakhstan. A hospital-based screening study using a panel of serum biomarkers. Anticancer Research. 2013; 13(10): 45954602.

23. **Lim.S.H, Kwon.J.W, Kim.N, Kim.G.H, Kang .J.M, Park.M.J, Yim.J.Y, Kim.H.U, Baik.G.H, Seo.G.S, Shin .J.E, Joo.Y.E, Kim.J.S, Jung** .H.C. Prevalence and risk factors of Helicobacter pylori infection in Korea: nationwide multicenter study over 13 years. BMC Gastroenterology. 2013; 13(104): 1-10.

24. **Hanafia .M.I and Mohameda .A.M**. Helicobacter pylori infection: seroprevalence and predictors among healthy individuals in Al Madinah, Saudi Arabia. The Journal of the Egyptian Public Health Association. 2013; 88: 40-45.

25. **Misra.V, Pandey.R, Misra.S.P, and Dwivedi.M**. Helicobacter pylori and gastric cancer: Indian enigma. World Journal of Gastroenetrology. February 2014; 20(6): 1503-1509.

26. **Pandya.H.B, Agarvath.H.H, Patel.J.S, Sodagar.N.R.K.** Emerging antimicrobial resistance pattern of Helicobacter pylori in central Gujarat. Indian Journal of Medical Microbiology. October 2014; 32(4): 408-413.

27. **J.V, Thacker.V.A and Trivedi.** Relationship of Nodular Gastritis and Helicobacterpylori infection in Children under treatment at Gujarat Adani Institute of Medical Science Bhuj, Kutch, Gujarat, India. Global Journal of Digestive Diseases. 2016; 2(2:26): 1-3. International Journal Of Current Medical And Pharmaceutical Research, Vol. 4, Issue, 2(B), pp.3073-3081, February, 2018 3080

28. J&K headlines [Internet] Jammu Kashmir; 70% people in Kashmir infected with H- pylori dated-3/17/2017 Available from https://jandkheadlines.com/headlines/70people-kashmir-infected-h-pylori-dak/

29. **Gupta.A, Bansal.D, Malhotra.M.S, Singh.R.S, Bhatia.A.S, Ded.K.S.** The prevalence of Helicobacter pylori in acid peptic disease. Archives of International Surgery 2014; 4(2): 91-95.

30. **Saha.R, Roy.P, Das.S, Kaur.N, Kumari.A, Kaur .I.R**. Application of a stool antigen test to evaluate the burden of Helicobacter pylori infection in dyspepsia patients. Indian Journal of Pathology and Microbiology. 2016; 59(1): 66-68.

31. **Rastogi.M, Rastogi.D, Singh.S, Agarwal.A, Priyadarshi.B.P, Middha.T**. Prevalence of Helicobacter pylori in asymptomatic adult patients in a tertiary care hospital: A cross sectional study. Biomedical Research. 2014; 25(4): 117-122.

32. **Thakuria.B, Barkataki.D, Hazarika.N.K, Saikia.P.** A Study on the Seroprevalence of Helicobacter Pylori in Patients with Gastrointestinal Diseases Attending a Tertiary Care Center. International Journal of Health Sciences and Research. July 2015; 5(7): 133-139.

33. **Satpathi.P, Satpathi.S, Mohanty.S, Mishra.S.K, Behera.P.K, Maity.A.B.** Helicobacter pylori infection in dyspeptic patients in an industrial belt of India. Tropical Doctor. 2016; 47(1).

34. **Kaore.N.M, Nagdeo.N.V, Thombare.V.R**. Comparative Evaluation of the Diagnostic Tests for Helicobacter pylori and Dietary Influence for Its Acquisition in Dyspeptic Patients: A Rural Hospital Based Study in Central India. Journal of Clinical and Diagnostic Research. 2012; 6(4): 636-641.

35. **Wanswett.C.W, Gulamjat.S.M, Mallikarjun.G, Sulochana.D.K**. Study of Helicobacter pylori infection and its antibiogram in gastroduodenal disorders in Regional Institute of Medical Sciences Hospital. Journal of Medical Society. 2014; 28(1): 9-13.

36. **Hunt.R.H., Chair**,Helicobacter Pylori in Developing Countries. World Gastroenterology Organisation Global Guideline. Journal of Gastrointestinal Liver Diseases. September 2011;20(3): 299-304.

37. **Kate.V, Ananthakrishnan.N, Badrinath.S, Ratnakar.C**. Prevalence of Helicobacter pylori infection in disorders of the upper gastrointestinal tract in south India. The National Medical Journal of India. 1998; 11(1): 5-8.

38. **Carmona GA** et al. Role of dietary antioxidant intake on the severity of gastritis. journal of gastro enterology. 2005; 31(5): 449-454.

39. **Kishore S, Aggarwal P, Muzammil K**. KAP study about carbonated drinks among medical and nursing students at teaching hospital. JK Science, 2009; 11(4): 196-199.

40. **Tuong W, Larsen E R, Armstrong A W**. Videos to influence: a systematic review of effectiveness of video-based education in modifying health behaviors. J Behav Med. 2012; 28.

41. **Haluk Mergen e**tal. Medical Check-Up Useful for Physician among New University Students during Enrolling Time to University. Gen Med. 2009; 6 (2): 69-73.

42. **Kishore S, Muzammil K, Aggarwal P**. Carbonated drinks and gastritis. JK Science, 2009; 11(4): 196.

43. **Kandulski A, Selgrad M, Malfertheiner P**. Helicobacter pylori infection: a clinical overview. Digestive and Liver Disease. 2008 (8): 619–26.

44. **Dr. Balachandran M.** Psychology for nursing students. Maanas Publication.2005.

45. **Kenneth H Falchuk M D, Lynn Peterson M D, Barbara J McNeil**, Prevalence of H pylori associated gastritis. 2007;15(3: 155-158.

46. **Hazra B, Hazra J.** Epidemiology of gastritis and peptic ulcer in north Bengal India. Indian J Public Health. 2008; 42(4):100-2.

47. **Nibras S Al Ammar, Saad Sh Hamadi, Ihsan Al Saimary**. Demographical study of H. Pylori associated gastritis. Advances in bioresea rch. 2011; 2 [1] : 47-61

48. *Hemalatha M, Sahadev Ramaiah, Neha Nanda, Preethan K Nagappa, Suguna B Venugopal.* Prevalence of H Pylori infection and histomorphologic spectrum in endoscopic biopsies. International Journal of Biomedical Research. 2013; 4: 11 Available from: www.ijbr.ssjournals.com-index.php-journal-article-view-403.htm

49. **Manimaran.R, Boj.A.** Seroprevalence of Helicobacter pylori in patients with symptoms of upper gastro intestinal tract at a tertiary care hospital. International Journal of Research in Medical Sciences. 2016; 4(11): 4945-4948.

50. **Bharath.T.S, Reddy.M.S, Dhanapal.R, Kumar .N.G.R, Raju.P.V.N, and Saraswathi.T.R**. Molecular detection and corelation of Helicobacter pylori in dental plaque and gastric biopsies of dyspeptic patients. Journal of Oral Maxillofac Pathology. January - April 2014; 18(1): 1924.

51. **Rajaram.G, Sumalatha.N, Ramadevi.A, Prakash.G.V**. Helicobater Pylori Infection Among Asymptomatic Children - A Seroprevalence Study. International Journal of Medical and Health Sciences. April 2013; 2(2): 132140.

52. **Basavanthappa BT**. A text book of nursing theories (1 st edition), jaypee brothers medical publishers private ltd. New Delhi 2007; 19-21.

53. **B.T Basavanthappa** (1998) textbook of nursing research 1st edition Noida, Jayee publications

54. **Polit and Hungler** (1992) Text book of "Nursing research principles and methods" 4th edition New York, Y.B Lippincott company.