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Research Article

**PREVALENCE OF DYSPEPSIA AMONG GENERAL
POPULATION AGED OVER 20****¹Dr Azmatullah, ²Dr Fawad Ullah, ³Dr Muhammad Shakeel Khan.**^{1,2,3}MBBS, Khyber Medical University, Institute of Medical Sciences, Kohat.**Article Received:** April 2020**Accepted:** May 2020**Published:** June 2020**Abstract:**

Dyspepsia is known as common medical disorder which has adverse economic effect due to constant utilization of drugs. Symptoms of dyspepsia have not specified yet. Pain or discomfort in the upper abdominal part along with gastrointestinal symptoms such as such as belching, vomiting, nausea, or it could be presented without them. The prevalence of dyspepsia differs throughout the world wide because of various diagnostic criteria, environmental change, time differentiation, and dietary factors. [The estimated prevalence of dyspepsia across the world is from 8.5% to 56%6-8. Lifestyle, H. pylori and other risk factors can affect. The causes of dyspepsia contain gastro esophageal reflux, peptic ulcer or functional dyspepsia. The definition of functional dyspepsia is presence of chronic symptoms in the upper abdominal pain despite of occurrence of any kind of specific structural problem. In 50% cases there is no clear cause found. The prevalence of dyspepsia in health centers cannot reflect its prevalence in the community as a whole. Many of the patients suffering from dyspepsia never bother to visit a physician and they do not prioritize these symptoms as a major or do self-medication. However, the accurate prevalence could not be calculated and it requires general population study.

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INTRODUCTION:

Dyspepsia is known as common medical disorder which has adverse economic effect due to constant utilization of drugs. [1] [2] Symptoms of dyspepsia have not specified yet [3]. Pain or discomfort in the upper abdominal part along with gastrointestinal symptoms such as such as belching, vomiting, nausea, or it could be presented without them. [4, 5] The prevalence of dyspepsia differs throughout the world wide because of various diagnostic criteria, environmental change, time differentiation, and dietary factors. [6,7] The estimated prevalence of dyspepsia across the world is from 8.5% to 56% [6-8]. [8] Lifestyle, H. pylori and other risk factors can affect. [9] The causes of dyspepsia contain gastro esophageal reflux, peptic ulcer or functional dyspepsia. The definition of functional dyspepsia is presence of chronic symptoms in the upper abdominal pain despite of occurrence of any kind of specific structural problem. [10, 11, 12] In 50% cases there is no clear cause found. The prevalence of dyspepsia in health centers cannot reflect its prevalence in the community as a whole. Many of the patients suffering from dyspepsia never bother to visit a physician and they do not prioritize these symptoms as a major or do self-medication. However, the accurate prevalence could not be calculated and it requires general population study.

SUBJECTS AND METHODS:

It was a cross-sectional study conducted in general population. All the participants over aged 20 were included in this study. The purpose of the study was well explained to them into their first language. A written informed consent was given to them who agreed to participate into the study. Those who signed the informed consent were called for interview. A self-generated questionnaire was made for demographic data, symptoms and variables. The dependent variables were self-reported gastrointestinal symptoms. Dyspepsia was defined as having upper abdominal pain accompanied by (or without) other gastrointestinal symptom such as, vomiting, nausea, excessive belching, heartburn, abdominal fullness, early satiety lasting for at least one month and occurring at least one day per week. Dyspepsia was categorized into four Ulcer-like dyspepsia was defined as upper abdominal pain with at least two of the four symptoms: a) pain often relieved by food, b) pain often relieved by antacids or food, c) pain before meals or when hungry, d) night pain. Dysmotility-like dyspepsia referred to upper abdominal pain with at least three of the four symptoms; a) abdominal bloating and distension, b) pain often aggravated by food, c) pain often relieved by belching, d) early satiety. Reflux-like dyspepsia was considered present if there was heartburn or acid regurgitation, or both, while

nonspecific dyspepsia was upper abdominal pain or nausea that did not fit into the other categories. Data analysis was performed in SPSS version 20. The level of confidence was kept 95%. The descriptive data were mentioned in the form of frequency tables and chart. For odds ratio univariate analysis was performed. For controlling the cofounders, the logistic regression was performed. The independent variables entered for logistic regression analysis were gender, family history, age group, theophylline consumption, education level and marital status. Other variables were not entered to the model because they may have been affected by dyspepsia.

RESULTS:

Total 190 participants were recruited into the study. In the current study the mean age of the participant was 41.3 ± 15 years. In which 84.2% were married and 38.5% were uneducated where as 11% were smokers. According to the symptoms 28.6% were having distention after the meal, 24.5% were having upper abdominal pain whereas 17.2% were having nausea and 6.7% were having vomiting after the meal, 23.7% were having heart burn and 19.3% were having belching.

The data reveals that many participants reported more than one symptom. The prevalence of dyspepsia was 56.4% from which 25.4% had evaluation for dyspepsia. The prevalence of undiagnosed dyspepsia was 42.1%. The prevalence of dyspepsia was seen more in elderly population most often in those who were consuming theophylline and those who had positive family history of peptic ulcer.

Difference in dyspepsia prevalence between gender, age groups and family history of peptic ulcer diseases was significant after adjustment for other factors. The risk of dyspepsia in females was 1.4 times greater than males. The risk in the over-60 group was higher than groups. No remarkable relationship found between dyspepsia with hormone therapy and NSAID drugs consumption.

Discussion

The common medical disorder which is known as dyspepsia has various prevalence across the world. In the current study the symptoms of upper GI were higher similarly to the findings of by Khoshbaten et al. [13] in Tabriz. [13] Sanandaj has stated that dyspepsia was common in general population. Dyspepsia was common (54.6%) in Sanandaj general population. Dyspepsia prevalence is diverse in various studies ranging from 13% to 56% [6,7,14] and uninvestigated dyspepsia prevalence also varies from 10% to 40%. [15,16] A study conducted by Telly et al has shown that 64% of participants were having ulcer-like

dyspepsia, 38% refluxlike and 43% were placed in more than one category. The study of UK has shown the statistics similar to these categories with 31%, 13%, 4% and 46%, respectively. [17]

These differences might be caused by different definitions of dyspepsia and the use of different diagnostic criteria, or might be the result of cultural and nutritional conditions of the studied groups. [18, 19] The major reason of higher prevalence is that patients usually are underdiagnosed and treated. Higher prevalence of *H.pylori* infection could be the risk factor. In the current study it was not possible to diagnose the patients according to *H.pylori* infection. Females were more prevalent in the risk of dyspepsia as compared to males. Various studies have not mentioned the difference according to gender, but some of the studies are in favor of more prevalence in females. [20] Probably, cultural, nutritional, social and hormonal factors have their respective impacts. In some studies, as well our study, smoking was not defined as a risk factor for dyspepsia. But in some other studies smoking is recognized as a risk factor for peptic ulcer. [21] Talley et al according to adjustment of age, marital status and literacy level, has illustrated that there is a relationship between dyspepsia and smoking. Maybe in some communities smoking is accompanied by other behavioral factors. [22] The current study has shown the statistics in which dyspepsia is more common among population over age 60 and less common in less than 40 aged. Literature has shown various age groups according to the country as in china the most affected population age group between 40-50 whereas in Japan the age group of 50 was prevalent. [23] These differences may be the result of various care statuses, environmental and nutritional factors, or drug consumption. The relationship between age and dyspepsia was variable in different studies. Whereas some studies has shown that prevalence decreases with the increase in age. Positive family history has shown significant association with dyspepsia. In Bernersen et al has also states that it could be due to similar genetic behavior or nutritional habits. [24, 25, 26]

Ofman et al has conducted a study which shows a strong association of NSAID consumption and high prevalence of dyspepsia. Whereas it was not common in people who were having low dose. [27] Conclusion

The current study has revealed that there is high prevalence of dyspepsia among general population. Whereas age, gender, positive family history, and NSAID consumptions are significantly associated with the high prevalence of dyspepsia.

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