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# The Relationship of Dietary Habits with Dyspepsia Syndrome Disease among Community Residents in Cibubuan Village, Conggeang in 2023

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#### **ABSTRACT**

Dyspepsia syndrome is the second highest disease in Sumedang district with a percentage of 14%. This study aims to determine the relationship between diet and the incidence of dyspepsia syndrome in Cibubuan Village. This research was conducted in Cibubuan village, Conggeang sub-district. This type of research is correlational analytic with cross sectional design. The research sample used was 96 respondents of Cibubuan village community members who were taken with proportional random sampling technique. Data collection techniques using research instruments in the form of questionnaires. Data analysis used in the form of chi-square statistical test. The results of this study indicate that the results of the bivariate test show a P-value = 0.015 which means that there is a relationship between diet and the incidence of dyspepsia syndrome in Cibubuan village, Conggeang sub-district in 2023. From this study it is expected that community members should be given education about diet with the incidence of dyspeptic syndrome.



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#### 1. INTRODUCTION

Dyspepsia is a collection of symptoms such as pain or discomfort in the upper abdomen, burning, nausea vomiting, fullness and bloating. There are various mechanisms that may underlie dyspeptic symptoms such as intestinal motility disorders, hypersensitivity, infection, or psychosocial factors. The prevalence of functional dyspepsia in the UK is 23.8%, while in the US it is 15%. In Indonesia, there is no overall prevalence of this disease. Based on (WHO) data, dyspepsia cases in the world reach 13-40% of the total population every year. (World Healt Organization, 2021).

Holmes and Rate's 1975 psychosocial model states that stress is a stimulus or cause of response (Smeltzer et al., 2010). This model relates stress as a causative factor that increases individual sensitivity to disease, this means that the more individuals are exposed to stress, the more susceptible individuals are to disease. Stress can lead to various gastrointestinal disorders, one of which is dyspepsia syndrome which is a group of upper digestive system symptoms that occur due to various factors (Lee, Kim, & Cho, 2014).

Globally, the prevalence of dyspepsia is 7-41%, but only 10-20% seek medical attention. The prevalence of dyspepsia in Western countries is 1-8%. The prevalence of dyspepsia in Indonesia is 40-50%. At the age of 40 years, it is estimated to occur in about 10 million people or 6.5% of the total population. In 2022, it is estimated that the incidence of dyspepsia will increase from 10 million people to 28 people, equivalent to 11.3% of the total population in Indonesia (Kemenkes RI, 2022).

From the survey data of several health centers spread across West Java Province, the 20 largest diseases in 2022 ranked first in the largest diseases (new cases) in 2022 with the number of occurrences reaching 58,556

people, namely primary / essential hypertension (I10), followed by acute nasopharyngitis (J00) 51, 406 people, and dyspepsia (K30) 42,566 people. Dyspepsia is ranked third in West Java province (West Java Provincial Health Office, 2022).

Based on the graph, the ten highest diseases from the Sumedang district health office survey data recorded the first rank are still hypertension with a percentage of 25%, followed by dyspepsia with a percentage of 14%, then common cold, contraception, respiratory disorders, myalgia, ARI, gastritis, dermatitis, from these data dyspepsia is in the second level of the highest level of the top 10 current diseases that occur in Sumedang district (Sumedang District Health Office, 2021). Meanwhile, data recorded at the UPTD Puskesmas Conggeang in 2020 showed that the first top 10 current diseases were Dyspepsia with a total of 1569 patients, while in 2021 dyspepsia decreased to third place with 799 people, and in 2022 there were 1085 new patients and 246 old patients who experienced Dyspepsia, with a total incidence in 2022 reaching 1,331 people (Data Puskesmas Conggeang, 2022).

Data in 2023 from January - March in several villages scattered in Conggeang kecamtan recorded JambuVillage as many as 11 patients consisting of 1 man and 10 women with an age range of 20 - 44 years, CibubuanVillage there were 8 patients including 3 women in the age range 20 - 44 years, 2 women in the age range 55- 59 years, 1 man in the age range 60 - 69 years, and 2 women in the age range > 70 years.

According to Reuters in Afifah (2018), adolescents often fail to prioritize their health after leaving homeand living in another city for college. Daily life such as eating with a balanced diet is often not fulfilled. Mostteenagers when entering student life often leave home and become boarders, where the life of boarders is identical to a less organized and less healthy lifestyle. Boarding school children often do not meet the needs of healthy food intake. Another factor affecting the incidence of dyspepsia syndrome is the age of respondents, some of whom are in the age range of 22-24 years (60.2%). The results of this study are in line with research by Khotimah and Ariani (2011) that adolescents aged 18 and above are prone to gastritis. The clinical picture determined in gastritis can be dyspepsia or indigestion. Based on the description above, the researcher is interested in conducting research on "The Relationship of Diet with the Incidence of Dyspepsia Syndrome in the Community in Cibubuan Village, Conggeang District in 2023".

#### 2. METHOD

The research method used is quantitative research with a Cross Sectional approach. The population in this study were community members in Cibubuan Village as many as 2,111 people. The sampling used in this study was random sampling, with a total sample of 96 people. The instrument used was a questionnaire. Data analysis includes univariate and bivariate analysis using the Chi square test.

# 3. RESULTS AND DISCUSSION

#### 3.1. Results

### A. Analisis Univariat

# 1) Overview of Dietary Habits

Table 1
Frequency Distribution of Community Diet in Cibubuan Village, Conggeang Subdistrict in 2023

Diet	Frequency	Percent (%)		
Good	29	30,2		
Poor	67	69,8		
Total	96	100,0		
	G D: D 2000			

Source: Primary Data 2023

Based on Table 1 on the frequency distribution of diet, it was found that most residents had a poor diet, namely 67 people (69.8%), and 29 people (30.2%) had a good diet.

#### 2) Overview of Dyspepsia Syndrome

Tabel 2
Frequency Distribution of Dyspepsia Syndrome in Cibubuan Village, Conggeang District in 2023

Category	Frequency	Percent (%)
Positive	55	57,3
Negative	41	42,7
Total	96	100,0

Source: Primary Data 2023

Based on Table 3 about the distribution of dyspepsia syndrome, it was found that most residents as many as 55 people (57.3%) were positive, and 41 people (42.7%) were negative.

# **B)** Bivariate Analysis

1) The relationship between diet and the incidence of dyspepsia syndrome in Cibubuan Village Conggeang District in 2023.

Table 3
Cross tabulation of association between diet and incidence of dyspepsia syndrome in Cibubuan Village, Conggeang District in 2023

Diet	D	Dyspepsia Syndrome					
	Pos	Positive		Negative		otal	P Value*
	F	%	F	%	F	%	
Healthy	15	51.7	14	48.3	29	100.0	0.015
Unhealthy	40	59.7	27	40.3	67	100.0	0.015
Total	55	57.3	41	42.7	96	100.0	

Source: Primary Data 2023

Based on Table 3 about the relationship between diet and the incidence of dyspepsia syndrome in Cibubuan Village, Conggeang District in 2023, it was found that residents who had a poor diet were 67 people (69.8%) and positive dyspepsia syndrome were 55 people (57.3%). Based on the Chi Squere statistical test with a confidence level of 95% assessed  $\alpha = 0.05$ , obtained P value = 0.015 where P value <0.05, so that H0 is rejected or Ha is accepted, in other words, statistically proven to have a significant relationship between diet and the incidence of dyspepsia syndrome in Cibubuan Village, Conggeang District, 2023.

#### 3.2 Discussion

#### 1) Diet Overview

The results of the Frequency Distribution shown in this study with the most categories are in the poor category with a total of 67 people (69.8%), and a good category of 29 people (30.2%). This shows that many residents of Cibubuan village have a poor and irregular diet. Assumptions regarding diet in the poor category can refer to the belief that an unhealthy or unbalanced diet can contribute to the risk or occurrence of a particular condition or disease. poor diet often means a lack of intake of essential nutrients such as fiber, vitamins, and minerals. Lack of these nutrients can disrupt the balance of the digestive system and potentially trigger symptoms of dyspepsia syndrome. an unbalanced diet that leads to obesity or being overweight may increase the risk of dyspepsia syndrome. This condition may be associated with pressure on the digestive system.

# 2) Overview of Dyspepsia Syndrome

The results of the Frequency Distribution shown in this study that the majority of residents of Cibubuan village who were affected by dyspepsia syndrome either symptomatic or acute were declared positive as many as 55 people (57.3%), and 41 people (42.7%) were negative. This shows that many residents of Cibubuan village who experience dyspepsia syndrome both new symptoms with positive criteria and those that are acute or called GEA disease (Acute Gastroenteritis).

According to the researcher's assumptions, assumptions about dyspepsia syndrome in the positive category are usually based on the belief that research or interventions related to dyspepsia syndrome can provide benefits or useful solutions for individuals who experience the digestive disorder, with more information available about dyspepsia syndrome, individuals will have better knowledge about the symptoms, causes, and how to manage them. More research and resources on dyspepsia syndrome will lead to an increase in the health support available to individuals suffering from this disorder. This includes access to appropriate medical services and psychological support. As research continues to develop, we may identify interventions that are more effective in managing or overcoming dyspepsia syndrome. These interventions may include dietary changes, stress management, or improved medical therapy.

# 3) The relationship between diet and the incidence of dyspepsia syndrome in Cibubuan Village, Conggeang District in 2023.

According to the results of this study with a p value of 0.002 (p < 0.05), there is a tendency for residents who experience a poor diet. According to the Indonesian Ministry of Health (2014), dyspepsia syndrome is something related to digestion and stomach acid, which is very dependent on the diet received by the person. The worse the regular diet, the greater the chance of developing dyspepsia syndrome.

This is in line with research conducted by Rahmini Shabariah and Thera Cahya Pradini (2020) on the relationship between diet and the incidence of dyspepsia syndrome in Cicurug Sukabumi which is statistically proven to have a relationship with a value of P < 0.05. Another study conducted by Sari Purwaningrum and Yuniar Wardani (2012) also showed that there was a relationship between diet and the incidence of dyspeptic syndrome in the Sewon I Health Center Working Area, Bantul with a value of P < 0.05. This study is based on the theory of Notoadmodjo (2013), which states that diet plays an important role in all health factors, a regular diet with a frequency that is not too long can maximize the digestive system and reduce stomach acid levels so that there is no contraction of increased stomach acid, causing nausea accompanied by vomiting which can indicate pain in the solar plexus. From the results of the author's research, it can be seen that there is a relationship between diet and the incidence of dyspepsia syndrome in Cibubuan Village, Conggeang District in 2023, with a p value of 0.002 or p < 0.05.

According to researchers' assumptions, fast eating and overeating can lead to excessive air consumption and increase the risk of dyspeptic syndrome symptoms such as flatulence and bloating. high-fat foods can increase the risk of acid reflux, which can cause abdominal pain and other symptoms associated with dyspeptic syndrome. spicy and acidic foods can stimulate the production of stomach acid, which can also increase the risk of dyspeptic symptoms. consuming heavy or large meals before bedtime can increase the risk of acid reflux and dyspeptic symptoms during sleep. Some individuals with dyspepsia syndrome may have intolerances to certain foods, such as lactose or gluten. Consumption of these foods may trigger dyspepsia symptoms.

# 4. CONCLUSION

Based on the results of research and discussion about the relationship between stress levels and diet with the incidence of dyspepsia syndrome in the community in Cibubuan Village, Conggeang District in 2023, it can be concluded that:

- 1) Most residents in Cibubuan Village, Conggeang Subdistrict in 2023 had a poor diet, namely 67 people (69.8%).
- 2) Most residents in Cibubuan Village, Conggeang District in 2023 with positive criteria for dyspepsia syndrome were 55 people (57.3%).
- 3) There is a significant relationship between diet and dyspepsia syndrome in Cibubuan Village, Conggeang District in 2023 with p value = 0.002 where P value <0.05.

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