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The Relationship Between Stress and Dyspepsia Incidents and the Melati Care Room Makassar Lovely People's

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Abstract

Stress can happen Because the demands of life. The prevalence of dyspepsia patients in health services covers 30% of general practitioner services and 50% of gastroenterology specialist services. The results of endoscopy performed on 550 dyspepsia patients in several hospitals in Indonesia from January 2013 to April 2014, found 44.7% of cases of gastritis and duodenitis abnormalities; and 6.5% of cases with gastric ulcers. The aim of the research was to determine the relationship between stress and the incidence of dyspepsia in the Melati Treatment Room, Sayang Rakyat RSU Makassar. of research is observational, analytical, cross-sectional design. The research was carried out in the Melati Treatment Room at RSU Sayang Rakyat Makassar from March 23 to April 15 2017. The sample in the research was 35 patients treated at the Melati Treatment Room at RSU Sayang Rakyat Makassar, using accidental sampling technique. The results of the study showed that there was a relationship between stress and the incidence of dyspepsia , with a value of P = 0.003 < 0.05 . It was concluded that the incidence of dyspepsia is closely related to a person's psychological condition, where someone who experiences a disturbed psychological condition or experiences stress is at risk of experiencing dyspepsia. It is recommended that hospitals provide appropriate information to patients about factors that can become cause of dyspepsia.

Introduction

The World Health Organization (WHO) states that the problem of mental health disorders throughout the world has become a very serious problem, Quoted in Saraceno (2002), estimates that there are around 450 million people in the world who experience mental health disorders. Stress is a mental disorder that is often encountered by people in everyday life and can be experienced in a variety of different situations. Stress can occur due to the demands of life. Most jobs with very limited time, coupled with demands to be fast and precise, make people live in tension/stress (van et al., 2005). Based on the consensus *of the International Panel of Clinical Investigators,* dyspepsia is defined as pain or discomfort that is mainly felt in the upper abdominal area (Mendoza et al., 2021). Dyspepsia is a common complaint encountered in daily practice and has been known for a long time with definitions that continue to develop, starting from all symptoms originating from the upper gastrointestinal tract, to the exclusion of reflux symptoms to the current definition which refers to the Rome III criteria.

Helicobacter pylori (Hp) infection is currently seen as an important factor in treating dyspepsia, both organic and functional, so discussions about dyspepsia need to be linked to treating *Helicobacter pylori* (Hp) infection (Elbehiry et al., 2023; Lee et al., 2022; Shatila & Thomas, 2022). Various meta-analysis studies show a relationship between *Helicobacter pylori* (Hp) infection and gastroduodenal disease characterized by dyspeptic complaints/symptoms (Wang et al., 2020). Functional dyspepsia is a syndrome characterized by nausea, epigastric pressure, swelling, flatulence and abdominal pain (Hiroto et al., 2022; Saito et al., 2023). Deficiency in gastric secretion, impaired gastric motility, deficiency in bile production such as diet, alcohol,

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tobacco, misuse of aspirin, psychosocial factors, *Helicobacter pylori* , failure of fundal relaxation in the digestive process are all possible causes, but none of them has been found to be definitive of the disease with unique case (Zavaleta et al., 2021). The relationship between symptoms and impaired gastric function in dyspepsia is very difficult to ascertain. Dyspepsia symptoms may be related to the presence of structural or biochemical diseases that may be believed to cause dyspepsia (Sayuk & Gywali, 2020). The prevalence of dyspepsia patients in health services covers 30% of general practitioner services and 50% of gastroenterology specialist services. The majority of Asian patients with uninvestigated dyspepsia and no danger signs have functional dyspepsia. Based on the results of research in Asian countries (China, Hong Kong, Indonesia, Korea, Malaysia, Singapore, Taiwan, Thailand and Vietnam), it was found that 43-79.5% of patients with dyspepsia were functional dyspepsia.

From the results of endoscopy performed on 550 dyspepsia patients from several hospitals in Indonesia from January 2013 to April 2014, it was found that 44.7% of cases had minimal abnormalities in gastritis and duodenitis; 6.5% of cases with gastric ulcer; and normal in 8.2% of cases. In Indonesia, data on the prevalence of cellphone infections in peptic ulcer patients (without a history of using non steroidal anti-inflammatory drugs/NSAIDs) varies from 90-100% and for functional dyspepsia patients it is 20-40% using various diagnostic methods (serological examination , culture, and histopathology).

The prevalence of dyspepsia undergoing endoscopic examination in various hospitals in Indonesia was quite high in Makasar in 2011 (55%). The results of research conducted by Putri & Widyatuti (2019), with the research title "The relationship between stress and the incidence of dyspepsia at the Purwodiningratan Jebres Health Center, Surakarta", obtained research results using the chi square test with a value of $p = 0.003$ ($p<0.05$), so it was concluded that the relationship between stress and the incidence of dyspepsia at the Purwodiningratan Jebres Health Center, Surakarta.

An initial survey conducted at the Sayang Rakyat Hospital in Makassar, obtained data on 310 people suffering from dyspepsia in 2014, in 2015 it decreased to 289 people, and in 2016 it increased to 464 people (Medical Records of Sayang Rakyat Makassar Hospital, 2017). In study This The problem was formulated regarding whether there was a relationship between stress and the incidence of dyspepsia in the Melati treatment room at Sayang Rakyat Hospital, Makassar (Tibbs et al., 2021; Mayer, et al., 2021). Aim study This is for now connection Between stress and the incidence of dyspepsia in the treatment room Melati RSU Sayang Rakyat Makassar.

Method

This study employed an observational and analytical design using a cross-sectional approach. The primary objective was to investigate the relationship between stress and the incidence of dyspepsia within a specific timeframe. Data collection and observations were carried out at a single point in time for each participant, ensuring that variables were measured concurrently without any longitudinal tracking.

The research was conducted in the Melati Treatment Room at Sayang Rakyat RSU Makassar from March 23 to April 15, 2017. The study utilized a non-probability sampling method with an accidental sampling technique. This approach involved selecting participants who were conveniently available during the data collection period and met predefined inclusion criteria.

The inclusion criteria for this study were as follows: patients admitted to the Melati Treatment Room at Sayang Rakyat RSU Makassar, individuals who agreed to participate as respondents, and those who were capable of communicating effectively to provide the necessary data. A total of 35 participants meeting these criteria were included in the study. These participants

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were recruited during the research period based on their presence in the treatment room and their willingness to engage in the study. This ensured that the sample comprised individuals who were readily accessible and met the predetermined requirements for meaningful participation.

Data were collected using structured questionnaires and clinical observations. The tools were designed to assess the psychological stress levels of the participants and document their dyspeptic symptoms. Stress was evaluated based on standardized criteria, while the presence of dyspepsia was confirmed through clinical diagnosis by attending healthcare professionals.

A bivariate analysis was employed to examine the relationship between stress and the incidence of dyspepsia. The statistical significance of the relationship was determined using the chi-square test. The threshold for significance was set at $p < 0.05$, indicating that findings below this value would confirm a statistically significant relationship.

The choice of a cross-sectional design enabled a straightforward analysis of the association between the independent variable (stress) and the dependent variable (dyspepsia), providing actionable insights within the given study context.

Result and Discussion

The analysis aims to address the central research questions by highlighting patterns, correlations, and themes that emerged from both quantitative and qualitative sources. Emphasis is placed on interpreting these results within the context of the study area and objectives. By doing so, the following findings provide the empirical foundation necessary for drawing conclusions and formulating recommendations relevant to the research problem.

Characteristics Variable Study

Stress

Table 1. Description of Stress in Respondents in the Treatment Room Jasmine RSU Sayang Rakyat Makassar Year 201 7

Stress	n	%
Stress	27	77.1
No stress	8	22.9
Amount	35	100.0

Source: Primary Data

Table 3 shows that of the 35 respondents studied, some big respondents experiencing stress, namely as many as 27 people (77.1%), and as many as 8 people (22.9%) respondents No experiencing stress.

The research results showed that of the 35 respondents studied, 27 respondents experienced stress. This is because there are many problems faced in life, resulting in pressure or mental tension which causes respondents to become stressed. When someone experiences stress, it will result in irregular eating patterns, causing dyspepsia. According to Wilson et al. (2020), psychological and emotional factors can affect the function of the digestive tract and result in changes in gastric acid secretion, affect the function of the digestive tract, affect the motility and vascularization of the gastric mucosa and reduce the pain threshold.

Dyspepsia patients generally suffer from anxiety, depression and neuroticism more clearly than normal people. Meanwhile, there were 8 respondents who did not experience stress (22.9%). This is due to differences in each person's coping, where someone who has good coping in dealing with problems will be calmer and will not feel stressed so that stress can be avoided.

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According to Cacha et al (2019), stress is the body's reaction to situations that cause pressure, change, emotional tension which is influenced by the environment and the individual's appearance in that environment.

The results of this research are in line with research conducted, in West Karawang, showing that 16.7% of employees were not stressed and the majority of employees experienced very severe stress, 52.2%.

Stress is an effort to adapt. If he is able to handle it, meaning there is no interference with the function of the body's organs, it is said that the person concerned is not experiencing stress (Horan et al., 2020; Pachankis et al., 2023). On the other hand, if he experiences problems with one or more body organs so that he cannot carry out his work functions properly, he is said to be experiencing distress. Acute stress can affect gastrointestinal function and trigger complaints in healthy people, one of which is dyspepsia. This is caused by excessive stomach acid and a decrease in gastric contractility which precedes complaints of nausea after a central stress stimulus (Camilleri, 2021).

Incident Dyspepsia

Table 2. Event Overview Dyspepsia in the Treatment Room Jasmine RSU Sayang Rakyat Makassar Year 201 7

Dyspepsia Occurrence	n	%
Happen Dyspepsia	25	71.4
No Happen Dyspepsia	10	28.6
Amount	35	100.0

Source: Primary Data

Table 4 shows that of the 35 respondents studied, some big respondents experience dyspepsia that is as many as 25 people (71.4%), and as many as 10 people (28.6%) respondents No experience dyspepsia.

Research result show that of the 35 respondents studied, respondent experience dyspepsia as many as 25 people (71.4%). This matter caused Because pattern eat what you don't regular so that causes pain or no comfortable in the area stomach part on. One of reason dyspepsia is factor psychological or stress. According to Oligschlaeger et al. (2019), stress can influence gastrointestinal function and trigger one of the complaints in healthy people dyspepsia Because sour gastric overload and presence decline contractility the preceding hull complaint nauseous after a stressful stimulus central.

Whereas respondents who did not experience dyspepsia as many as 10 people (28.6%). This matter caused Because dyspepsia besides caused Because factor psychology, disease this can also be done caused by various factor for example exists stomach infections, unhealthy lifestyle, strict diet and history of previous gastrointestinal infections.

Research result This in line with research conducted, in West Karawang, shows that part big employee experiences dyspepsia that is as many as 67.3% and 33.7% not experience dyspepsia.

Psychological and emotional factors (such as anxiety and depression) can affects gastrointestinal function and results in changes in acid secretion stomach, affecting the motility and vascularization of the gastric mucosa as well lowers the pain threshold. Patient dyspepsia generally suffer from anxiety , depression and neuroticism more clearly than normal people.

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Bivariate Analysis

The Relationship Between Stress and Dyspepsia

Table 3. The Relationship Between Stress and Incident Dyspepsia in Space Jasmine Care, RSU Sayang Rakyat Makassar Year 201 7

Stress	Incident Dyspepsia				Amount		P-Value
	Happen Dyspepsia		No Happen Dyspepsia				
	n	%	n	%	n	%	
Stress	23	85.2	4	14.8	27	100.0	0.003
No stress	2	25.0	6	75.0	8	100.0	
Amount	25	71.4	10	18.6	35	100.0	

Source: Primary Data

Table 5 shows that of the 35 respondents studied, 27 respondents experienced stress, most of whom experienced dyspepsia, namely 23 people (85.2%), and 4 people (14.8%) did not experience dyspepsia. Meanwhile, 8 people did not experience stress, the majority did not experience dyspepsia, namely 6 people (75.0%), and 2 people (25.0%) experienced dyspepsia.

Fisher's exact test results obtained a value of P = 0.003 < 0.05. The research hypothesis was accepted, which means there is a relationship between stress and the incidence of dyspepsia in the Melati Treatment Room, Sayang Rakyat RSU Makassar.

The research results showed that of the 35 respondents studied, 27 respondents experienced stress, most of whom experienced dyspepsia, namely 23 people (85.2%). This is due to ineffective coping in dealing with every problem that occurs in life, so that every time a problem occurs the respondent experiences tension and pressure which causes the respondent to become stressed. When someone experiences stress, it will result in irregular eating patterns, causing dyspepsia. However, the results of the study found that 4 people (14.8%) did not experience dyspepsia. This is because each person has a different response in dealing with problems, so that even if someone experiences stress, if they continue to eat a good diet, they will avoid digestive problems, one of which is dyspepsia.

Whereas respondents who did not experienced stress as many as 8 people, some big No experience dyspepsia that is as many as 6 people (75.0%). This matter caused because one _ reason dyspepsia is factor psychological that is pressure or stress, so someone who doesn't experiencing stress then feelab calmer and also pattern Eat more regular so that spared from happen dyspepsia. But on the results study found 2 people (25.0%) experienced dyspepsia. This matter caused Because dyspepsia can cause various factor for example Because exists stomach infections, lifestyle, environment, diet and history of previous gastrointestinal infections.

Fisher's exact test results obtained P value = 0.003 < 0.05. Hypothesis study accepted meaning there is connection between stress and incident dyspepsia in the Treatment Room Melati RSU Sayang Rakyat Makassar. There is stress can influence gastrointestinal function and trigger one of the complaints in healthy people dyspepsia. This matter caused Because sour gastric

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overload and presence decline contractility the preceding hull complaint nauseous after a stressful stimulus central. Besides that's stress change secretion sour stomach, motility, and vascularization channel digestion. This is in accordance with the theory put forward by (Burton et al.,2020; Scamvougeras & Howard, 2020), that disturbance or a disease characterized by complaints psychic and somatic that can be is abnormality functional an organ with or without symptom related objectives tightly with stressor or incident psychosocial certain.

Research result This in line with research conducted at the Community Health Center Purwodiningratan Jebres Surakarta", obtained p value = 0.003 ($p<0.05$), so concluded that stress is one of the influences to incident dyspepsia at the Community Health Center Purwodiningratan Jebres Surakarta.

Circumstances severe stress linked with intake high fat, less fruit and vegetables, more Lots snacks, and decline frequency breakfast morning, so on the pattern eat what you don't regular they can cause dyspepsia. Stress psychosocial is very related with degrees anxiety, found the more Lots stressor psychosocial the more tall degrees accompanying anxiety in the patient dyspepsia organic.

Sufferer depression is so not noticing health himself like No obey pattern Eat or pattern eat it become No regular, less exercise exercise, smoking. Besides that, it is assumed that the more critical rate of depressive episodes someone, possibly big will related with decline quality life although new A little obtained proof empirical for support matter This. A number of studies has proven exists impact on quality life somebody to enhancement degrees depression someone.

Irregularity Eat like habit poor eating, rushing, and having an unscheduled schedule regular can cause dyspepsia. Sufferer depression must handle with truly Because worried sufferer depression is so not noticing health himself like No obey pattern Eat or pattern eat it become No regular, less exercise/exercise, smoking. Based on statement the so can concluded that sufferer very depressed notice health himself including pattern the food becomes it No regular that will be it cause emergence dyspepsia functional in patients depression.

Conclusion

Based on the results of research on the relationship between stress and the incidence of dyspepsia in the Melati Treatment Room, Sayang Rakyat RSU Makassar, it was concluded that (1) Of the 35 respondents studied, the majority experienced stress, namely 27 people (77.1%); (2) Of the 35 respondents studied, the majority of respondents experienced dyspepsia, namely 25 people (71.4%) ; (3) There is a relationship between stress and the incidence of dyspepsia in the Melati Treatment Room, Sayang Rakyat Hospital, Makassar , with a value of $P = 0.003 < 0.05$.

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