

Anxiety in Patients with Gastroesophageal Reflux Disease (GERD)

Asmalina Rahayu¹, Mutingatu Sholicah², Putrawansyah^{3*}

^{1,2,3}Fakultas Psikologi, Universitas Ahmad Dahlan, Yogyakarta, Indonesia

*putrawansyah.392@gmail.com

ABSTRACT

This study aimed to reveal anxiety in 3 patients with gastroesophageal reflux disease (GERD). This study used a qualitative method with a case-study approach. Data were obtained through interviews and observations and were analyzed using content analysis. The results showed that the subjects experienced anxiety after being faced with a stressor that was considered severe, namely the death of a family member and facing a new job. This condition stimulated excessive thoughts about death, thoughts about the inability to do and complete the work, and carry out daily activities, hence such negative thoughts often cause difficulty concentrating, difficulty focusing, and confusion, often forgetting. These thoughts cause feelings of worry and alertness to crowds, and other social situations as well as to things that have not yet happened, such as death. Then these feelings trigger the emergence of GERD symptoms such as difficulty swallowing, shortness of breath, heartburn, cough, fever, dizziness, frequent loss of consciousness, excessive cold sweat, causing withdrawal behavior from social life, and difficulty sleeping. The results of this study are expected to be used as information to develop strategies for overcoming GERD, in addition to medical efforts.

Keywords: anxiety, gastroesophageal reflux disease (GERD)

Introduction

Gastroesophageal reflux disease, also known as GERD, is a condition when stomach acid backs up into the esophagus. Leading to several symptoms, namely burning and pain in the chest, regurgitation, and common complications such as esophagitis or inflammation of the esophagus. This inflammation causes severe pain when swallowing, which reduces appetite (Patriquin & Mathew, 2018). This causes various symptoms that bother the sufferer (Orzechowska et al., 2013). GERD is one of the common gastrointestinal diseases in western countries, the frequency of GERD is also increasing in Asia (Song, 2012). In 2010, the symptom-based prevalence of GERD was 6.2-7.1% in East Asia, and prior to 2005 the prevalence was 2.5-4.8% in East Asia (Song, 2012). In Indonesia, there are no epidemiological data regarding this disease, but the Division of Gastroenterology of the Department of Internal Medicine FKUI RSUPN Cipto Mangunkusumo Jakarta found 22.8% of cases of esophagitis among all patients who underwent examination endoscopic for indications of dyspepsia (Simadibrata, 2011).

GERD has a negative impact on the quality of life of those affected, as the symptoms that manifest themselves cause sleep disturbances, reduced productivity at work and at home, and impaired social activities. Compared to the general population, patients with GERD who suffer from it have a lower quality of life, as well as the impact on daily activities such as physical problems, social functioning, mental health, which are comparable to patients with other chronic illnesses such as congestive disease. Heart disease and chronic arthritis (Xiao et al. all., 2015).

GERD has an impact on the quality of life of sufferers, this can be seen from the high anxiety and depression experienced by GERD sufferers. Basically, anxiety is a natural thing that has been experienced by every human being. People with GERD who suffer from it will have panic attacks very easily, because the state of mind is anxious and accompanied by stomach acid that rises in the

esophagus (Alexandre et al, 2016). This anxiety usually occurs in people with GERD due to excessive levels of suggestion, causing panic attacks accompanied by weakness and cold sweats (Alexandre et al, 2016). Orzechowska et al., 2013 found a relationship between psychology such as increased stress and anxiety intensity with GERD complaints. A study published in *Alimentary Pharmacology and Therapeutics* (2007) found that people who are often anxious are two to four times more likely to develop GERD.

Anxiety can trigger the emergence of GERD symptoms through the brain-gut axis mechanism. The presence of psychic stimulation or stressors will affect the balance of the autonomic nervous system, where the central nervous system, autonomic nervous system, and the enteric nervous system can communicate back and forth and influence each other, and that is allowing psychological disorders such as anxiety and depression to affect the activity, motor, sensory, and secretory pathways of the gastrointestinal tract and contribute to symptoms of functional GERD. The increase in adrenal cortex cortical that comes from stimulation of the cerebral cortex will stimulate gastric acid production (Levenstein, 2008), in a state of increased gastric acid causing gastric contents to push up into the esophagus. If the esophageal sphincter is relaxed, gastric contents will enter the pharynx, nasopharynx, and mouth, this interaction is believed to be the cause of GERD (Hadi, 2008).

Andri (2014) found that anxiety and depression were associated with a two to four times higher risk of GERD. Other studies that reveal the relationship between anxiety disorders and GERD, such as research by Agatha (2017) which found that anxiety was associated with the incidence of GERD in college students. Anxiety is a response to certain threatening situations and is a normal thing that come with development, change, new experiences, as well as the search for identity and life (Kaplan, 2010). Anxiety is defined as a feeling of discomfort and fear, accompanied by several unpleasant physical symptoms, including muscle tension, rapid heart rate, shortness of breath, dry mouth, sweating, and shaking (Froggatt, 2009).

Nevid, Rathus and Greene (2005) classify anxiety as three symptoms, namely: 1. Physical symptoms, such as shaking of limbs, profuse sweating, sweaty palms, dizziness, fainting, dry mouth, and difficulty in breathing, 2. Symptoms, i.e. avoidant, addictive, or clinging behavior, shaken behavior, 3. Cognitive symptoms, i.e. fear of being unable to work through problems, confusion, difficulty concentrating, very attentive to bodily sensations, concerned with insignificant things. Swartz (2014) people who experience anxiety will cause psychological symptoms characterized by irritability, fear, worry, difficulty concentrating, and the emergence of feelings of uncertainty and physiological symptoms, namely sweating, dry mouth, feeling hot, or cold, heart palpitations, feeling of muscle tension, shaking, nausea. Based on these issues, this study aims to describe the description of anxiety in patients with GERD.

Method

This research uses a qualitative approach with a case study investigation strategy. The sampling technique used purposive sampling with subject criteria were people with endoscopy diagnosis who had GERD. This study involved three subjects who had been diagnosed with GERD and three significant others. The results of the interviews with the significant people are used as complementary data and comparative data to the main data. The method of data collection in this study used the method of interviews, the results of the interviews were analyzed using content analysis. Credibility and reliability of research are achieved by triangulating data sources.

Results

Based on the results of the study, it was found that the description of anxiety in GERD sufferers stems from unpleasant events experienced by the three subjects. These unpleasant events included the death of a family member who had a very close relationship with the two

subjects, namely as saying by the significant person from subjects one and three, namely "after being left by his mother died, the father became a person who was often silent and looked like a dazed person, maybe he could you say that because, he is a person who does not like to be silent and gloomy, but since then, he has become a person who often keeps silent," explained a significant person from the first subject. The words above said that the first subject experienced anxiety after his mother died because the subject was the closest person to his mother, so that since then the subject began to appear to prefer silence and solitude, while according to a significant person, the subject was a cheerful and joking person.

Unpleasant events such as being abandoned by the closest person were also felt by Third subject, as said by a significant person from the third subject, namely, "but my little sister likes to look gloomy and alone, she is also rarely with the children since she is sick, then because maybe at that time, our first brother died. My younger brother was the saddest and most grieving person. So since then he has become sad." The word significant person from Third subject. These words illustrate that the third subject have experienced anxiety since the first sister of the third subject died, this makes Third subject feel very sad and grieving

Meanwhile, the unpleasant incident experienced by second subject was when the subject was faced with responsibilities and new habits that he had to endure for a long time. This was explained by the significant person of the subject himself, namely "I remember that time my family and I had just returned from Yogya because of my education matters, mother suddenly said she was afraid and I asked her and said she did not know what she was afraid of but the mother also had a fever at that time, immediately I said the break was because I was tired. So from there it was followed by other symptoms which are actually not frequent but significant, finally go to the doctor," he said.

This explains that the feeling of excessive fear for unknown reasons has been experienced by second subject since moving from the city of Yogyakarta in the framework of her husband's educational assignment and then returning to Ternate. Then the significant person added that apart from that, since then the mother was transferred from Ternate to Tidore so that the subject often had to take sea trips every day and this also made the subject often feel tired, as was said, "so after returning from Jogja, you teach So teaching him was his job there in Tidore, then I stayed in Ternate. I wanted to move because I didn't want to be assigned to another island, maybe because it was a different island and I had to go back and forth every day so I was afraid of getting tired, but it was a bit difficult to take care of moving so I asked my wife to be patient, from there since then it's possible," he explained.

The unpleasant events experienced by the three subjects caused the three subjects to have difficulty focusing their minds and concentrating on carrying out daily activities and work to the problems they experienced. This is as stated by the three subjects as follows, "when working on a project or working on an office problem, if for example there is a problem, miss, I'm stressed, the stress immediately appears tense like that, that's the trigger for sure it's stress, just like shortness of breath." Said first subject. It was explained that when experiencing difficulties first subject felt unable to focus because he felt tense.

Second subject said, "Before being diagnosed I was really worried, after being diagnosed I became worried and scared, my thoughts were everywhere, I'm not too old either. In the past, when I was first diagnosed with gerd, I was worried, miss, like it was difficult to concentrate, my mind couldn't focus. So if, for example, I'm worried, I can't concentrate when I'm teaching, I'm at school, once when I had a meeting at that school, I just talked, but after that I was like, what should I say? Like that." Obviously second subject. The subject's words explained that the anxiety he experienced before and after being diagnosed with GERD, so that the subject was unable to focus his mind and had an impact on daily activities such as when teaching class, the subject often forgot what he was talking about to his students.

Apart from that, third subject explained, *"I like not to focus, especially when I'm working, so I can't concentrate, if I'm not feeling well, everything doesn't work, so I don't work, taking care of the children, I like to feel messy myself."* This illustrates, even third subject was unable to focus her mind so that she could not divide tasks when she was a mother and at work, especially when she was anxious, the subject became more difficult to talk to because sometimes she felt she did not understand what the other person was saying.

The existence of these various forms of negative thoughts triggers feelings of excessive worry about various things related to death, crowds, and other social situations, so that a feeling of alertness arises when news about death and terrible things such as road accidents etc. arise. This was also said by subject one, namely *"I don't know what kind of invitation it is especially like for example there is an invitation to tahlilan. There is news of people dying like that, that makes me really worried. In the mosque, when an announcement is made, like an announcement that someone has died, they immediately become anxious. The problem is if, for example, you hear the sound, your thoughts immediately go everywhere,"* explained subject one. Subject one experienced an excessive feeling of fear of death, so that when receiving any invitation from people and hearing announcements from the mosque, the subject became very anxious because he thought of death.

The second subject explained, *"Yeah, so I was afraid to die, so before being diagnosed, I already felt it, when I was diagnosed, I was even more scared. These words describe the subject's anxiety about death before he was even more anxious after being diagnosed with GERD because he often thinks that many people who die are caused by GERD. Then Third subject said, "That's all I like to suddenly think, ouch long life, or not, ouch I think it's going to be a while, ouch, let alone getting sick, ouch, all kinds of things, it ends in a death like that, so it's just scary, then this is me Until this second, I haven't dared to come to a dead person, right? This expression illustrates that Third subject feels anxious about death so that he is afraid of news of death because he thinks that he too will die too."*

These feelings cause various GERD symptoms to appear, such as difficulty swallowing, shortness of breath, heartburn, coughing, fever, dizziness, frequent loss of consciousness, and excessive cold sweats to difficulty sleeping accompanied by avoidance of social life. This was explained by the first subject, namely, *"but if for example my shortness of breath is really bad, I can't even sleep. That is, if I suddenly heard the voices of many people, I was shocked. Immediately, if I heard it, I was shocked. If I suddenly heard it, I was immediately shocked. That neck is so tight. If I'm already tense, it's also hard for me to swallow my saliva, it's really hard"*. These words describe the subject feeling physically disturbed, namely difficulty swallowing saliva, tension in the neck and shortness of breath which also occurs due to a shocked reaction when hearing a loud voice, causing one subject to avoid the crowd so as not to feel the physical symptoms of the anxiety he is experiencing.

Second subjects also felt this way, as he said as follows *"yes, it's annoying, like suddenly your heart beats irregularly. Can get dizzy, then feverish like that. Body heat. Yes, sometimes when swallowing it is difficult, it's like something is blocking it. Yes, it's shaking, it's cold in the hand. The hands and feet are cold but the body is hot."* Second subjects explained. These two subjects also felt physical symptoms such as a racing heart, dizziness, fever, difficulty swallowing saliva, cold feet, and hands. This causes the subject to be alone more often and seek peace by sitting alone while relaxing as he said, *"Istighfar, if possible, don't be in a crowded place, so I prefer to be alone to be calmer. It's light relaxation."*

These physical symptoms were also felt by the third subject and even fainted, as he said, *"heart pounding, followed by drooling, difficulty swallowing, tense throat, if it's really bad, it's very hot, if it's too bad, I'd better sit still." And don't do anything because I often pass out when it's too late."*

Discussion

The three subjects showed symptoms of anxiety since experiencing unacceptable unpleasant events, as said by Kaplan et al (2010) that anxiety is a response to a situation is a response to certain situations that are threatening and is a normal thing that happens accompanied by developments, changes, new experiences, as well as in finding self-identity and life. As experienced by subjects one and two, both subjects experienced anxiety since the death of a family member who had a close relationship with the two subjects.

The anxious condition experienced by the subject is in accordance with what Kevin (2020) said that everyone can feel anxious when they are about to face, or are in a situation that is felt threatening or frightening, for example moving schools, starting a new job and going to undergo surgery (Kevin, 2020). As experienced by subject three who experienced it since starting a new job, and subjects one and two who had to face their own lives after losing the people closest to them.

Since experiencing a change that was felt to be too heavy, the three subjects began to be disturbed by thoughts about death, dangerous things that might happen, the inability to solve a problem and work. Individuals who experience anxiety are overwhelmed by feelings of inability and inability to solve problems (Ghufron and Risnawati, 2014) and various symptoms, one of which is the difficulty concentrating (Patriqui, et al., 2018). Difficulty in concentrating experienced by the three subjects, causing subjects two and three to often experience, get confused, and forget when doing activities. Negative thoughts led to feelings of worry, alertness, and feeling threatened in the three subjects. In subjects two and three, the thought of death caused worry for their families. Whereas in the first and second subjects, the thought of death causes a feeling of alertness to several things, namely news about death and social situations.

In addition, feelings of excessive worry and social rejection when making mistakes make the subject alert because of a feeling of being threatened so that solitary behavior appears accompanied by GERD symptoms such as cold sweats, heartburn, tension, palpitations, tightness in the throat, dizziness, tremors, as well as hands and feet feeling cold, difficulty swallowing, shortness of breath, whereas subject three often lost consciousness. Levenstein (2008) explains that anxiety can cause GERD through the brain-gut-axis mechanism, giving rise to some of the symptoms of GERD.

Anxiety and illness suffered by the three subjects disrupted their daily activities, thus affecting their quality of life, as stated by Xiao, et al. (2015), and Jang, et al (2016) that reflux, depression, and anxiety of patients with GERD affect the quality of life of GERD patients. GERD has so far been one of the diseases that received medical intervention but based on research, it appears that anxiety is a triggering factor for the appearance of GERD symptoms. These results are expected to be the basis for developing a more comprehensive GERD management strategy.

This research was carried out during the Covid 19 pandemic, which added to the anxiety of the subjects, thus affecting the data-collection process, even though it was carried out following the applicable health protocols.

Conclusion

Based on the results of this study it can be concluded that the description of anxiety in the three subjects has similarities, namely the three subjects experienced anxiety before being diagnosed with GERD. This stems from the inability of the three subjects to deal with unpleasant events that affect the minds of the three subjects so that excessive negative feelings and emotions arise, which causes GERD symptoms accompanied by avoidant behavior from social life.

It is hoped that this research can be used by service providers for GERD sufferers in developing strategies to deal with the disease by considering their psychological condition.

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