Background: Fasting before surgery has the effect of reducing the acidity and volume of the stomach which affects the risk of nausea and vomiting leading to aspiration pneumonia and gastric regurgitation that may occur during anesthesia. Purpose: The study aims to determine the description of the level of thirst in preoperative patients at the Central Surgical Installation (IBS) of Dr. H. Moch. Ansari Saleh Banjarmasin Hospital. Methods: This study used descriptive method with cross sectional design. The sampling technique with total sampling obtained 35 respondents. Data analysis using descriptive analysis. Findings: The study showed 18 respondents (51.4%) had fasted for 5-8 hours before surgery, 13 respondents (37.1%) had a habit of drinking more than 2000 ml of water per day, this study showed that the level of thirst of respondents in the mild category was 31.4%, the level of moderate thirst was 42.9% and the level of severe thirst was 25.7%. Conclusion: That more respondents experienced moderate thirst.

Keywords: thirst level, preoperative patients, fasting duration

Introduction:

One of the most important needs for humans is water, which maintains fluid balance in the body, providing health benefits and improving quality of life. Thirst signals the effect of a signal for fluid fulfillment in the body, a factor regulated through information feedback by active central and peripheral nervous system mechanisms. The desire to drink in humans is also an environmentally and psychologically influenced behavior. The act of drinking stemming from thirst is to maintain an ideal hydration status in the body. (1).

Undergoing elective surgery, patients are previously required to fast. This has the effect of reducing the acidity and volume of the stomach which has an impact on the risk of nausea and vomiting which causes aspiration pneumonia and regurgitation of the stomach which may occur during anesthesia, especially when inducing anesthesia, better known as Mendelson's syndrome (2).

Undergoing elective surgery, patients are previously required to fast. This has the effect of reducing the acidity and volume of the stomach which has an impact on the risk of nausea and vomiting which causes aspiration pneumonia and regurgitation of the stomach which may occur during anesthesia, especially when inducing anesthesia, better known as Mendelson's syndrome (3).

The ASA issued a preoperative fasting recommendation guideline stating that water may be drunk up to 2 hours
before scheduled surgery, whether for general, regional anesthesia, or sedation procedures. ASA believes that this statement is based on various studies and research that state that 2-4 hours of fluid fasting does not affect gastric volume and pH when compared to fluid fasting for more than 4 hours. Fasting for 2-4 hours is also reported to provide less thirst and hunger than fasting for more than 4 hours. One meta-analysis reported that 2-4 hours of preoperative fluid fasting reduces the risk of aspiration (4).

One of the most important tasks of anesthesiologists and nurses in preparing patients for surgery is the preparation of the gastrointestinal tract. Healthcare providers concerned with patient health, hydration, comfort, and safety should strive for safe preoperative fasting without excessive hunger and thirst. Although current guidelines on the subject, practical guidelines for preoperative fasting vary widely between countries, hospitals, and even anesthesia and surgery departments themselves, and observational and experimental studies on patient comfort from both preoperative fasting and fluid restriction are still very limited, and related studies are still relatively scarce (5).

Preliminary study on March 5-10, 2023, at the central surgical installation (IBS) of RSUD dr. H. Moch. Ansari Saleh Banjarmasin found that perioperative implementation usually starts the day before surgery. The implementation of preoperative fasting SOPs is not directly written, the last drink fasting limit is only written according to the needs and instructions of the doctor, and sometimes it is not done properly. This situation is partly influenced by changes in the action schedule from the predetermined hours due to obstacles from doctors or surgical operators who are still providing services at the clinic, the limited number of operating rooms, or changes in patient conditions. This resulted in changes to the operating schedule from the specified hours. The direction for preoperative fasting only conveyed the deadline for eating and drinking without certainty when the last hour of eating and drinking was, so patients tended to stop eating and drinking after dinner or at midnight. Therefore, there is a significant difference from the applicable preoperative fasting SOP, which causes the patient's fasting to be longer.

This study aims to determine the description of the level of thirst in preoperative patients at the Central Surgical Installation (IBS) of Dr. H. Moch. Ansari Saleh Banjarmasin Hospital.

**Methods**

This research method is descriptive with cross-sectional design. The sampling technique with total sampling obtained 35 respondents. The data collection tool used was a questionnaire sheet to measure the level of thirst in preoperative patients and patient medical records. Data analysis using descriptive analysis.

**Results**

**Characteristic respondent**

Table 1. Frequency Distribution of Respondent Characteristics Based on Demographics

| Characteristics | No. | Gender | f  | %   |
|-----------------|-----|--------|----|-----|
| Gender          |     |        |    |     |
| 1. Male         | 23  | 65.7   |    |     |
| 2. Female       | 12  | 34.3   |    |     |
| Total           | 35  | 100    |    |     |

| Characteristic | No. | Level | f  | %   |
|----------------|-----|-------|----|-----|
| Education      |     |       |    |     |
| 1. Elementary  | 0   | 00.0  |    |     |
| 2. Junior      | 0   | 00.0  |    |     |
| 3. High        | 28  | 80.0  |    |     |
| 4. College     | 7   | 20.0  |    |     |
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Table 2. Description of Responder Characteristics Based on Height, Weight, and Age

| Characteristic | Min | Max | Mean |
|----------------|-----|-----|------|
| Height         | 146 | 187 | 158.97 |
| Weight         | 47  | 77  | 61.84 |
| Age            | 26  | 44  | 34   |

An overview of the level of thirst in preoperative patients at the Central Surgical Installation (IBS) at Dr. H. Moch. Ansari Saleh Hospital Banjarmasin

Table 3. Frequency Distribution of Thirst Level in Preoperative Patients Based on TDS

| No. | Thirst Level | f  | %  |
|-----|--------------|----|----|
| 1.  | Light        | 11 | 31.4 |
| 2.  | Medium       | 15 | 42.9 |
| 3.  | Heavy        | 9  | 25.7 |
| Total|              | 35 | 100 |

Table 4. Distribution of Supporting Characteristics Based on Frequency of Fasting Duration and Water Drinking Habits

| No. | Long fast   | f  | %  |
|-----|-------------|----|----|
| 1.  | 2-4 hours   | 7  | 20.0 |
| 2.  | 5-8 hours   | 18 | 51.4 |
| 3.  | 9-12 hours  | 10 | 28.6 |
| Total|             | 35 | 100 |

| No. | Water Drinking Habits | f  | %  |
|-----|------------------------|----|----|
| 1.  | > 2000 ml              | 13 | 37.1 |

Discussion

Gender

This study shows that there are more male respondents than female respondents. The research is in line with research conducted by (6) with the title Overview of Paraneesthesia Fasting Duration in Planned Surgery Patients at Raden Matta her Jambi Hospital October-December 2016 Period. The results of his research state that the gender distribution of male respondents is more than female respondents. Data in Table 4.2 the number of male respondents is more than female respondents.

In general, gender is not related to the level of thirst of preoperative patients. However, gender can be related to the length of fasting where women have higher drowsiness and fatigue during fasting than men as mentioned in the research of (7).

According to the researchers, related to the level of thirst, men may have a higher level of thirst compared to women due to lower drowsiness and fatigue which may increase physical activity which also increases thirst. In women, high sleepiness, and fatigue cause women to fall asleep faster, reducing thirst levels.

Level education.

This study states that most respondents have a high school education. This study is in line with research conducted by (8), with the title The Relationship between Preoperative Fasting Duration and Blood Sugar Levels Before Induction in Elective Surgery Patients at Dr. Hasan Sadikin Hospital Bandung. The results of his research stated that most of the respondents had a high school education, namely 33.1%. The level of education provides an understanding to a
person, where people with higher education have a better understanding of things as stated by (9).

According to the researcher, the level of education is not directly related to preoperative thirst but is related to the level of knowledge and awareness to carry out preoperative fasting management to control the level of thirst before undergoing surgery.

**Employment Status**

This study shows that more respondents work than respondents who do not work. Respondents who work allow activities that consume more energy than respondents who do not work, explained in his research that quite a long time assumes that the length of service with the time that workers are experts in doing it. Doing the same activities repeatedly and continuously makes it a habit. The longer a person's period of work, the greater the level of exposure to heat that he will receive until finally, workers will experience health problems such as dehydration (10).

According to researchers, work is directly related to preoperative thirst levels. Respondents who work expend more energy, causing fatigue which triggers thirst. The more work done, the higher the level of thirst experienced.

**Age**

This study shows that the average age of respondents is 34 years, which indicates that respondents are of mature age. This research is in line with (11), entitled The Relationship Between Fasting Duration and the Incidence of Post Operative Nausea Vomiting in Post General Anesthesia Patients at Tk.II Pelamonia Makassar Hospital. The results of his research state that the average age of respondents is 31 years old, which is included in the adult age category.

Age is related to the patient's readiness to face surgery. Rahmawati (2014) explains that age is one of the variables that affect the recipient's perception of total comfort. Age will affect normal physical characteristics. The ability to participate in the preoperative physical examination is also influenced by age. Age factors, whether children, adults, or the elderly can increase the risk of surgery. As age increases, the patient's physical capacity to adapt to the stress of surgery becomes inhibited due to the regression of certain bodily functions.

According to the researchers, age is not directly related to the level of preoperative thirst but is related to the patient's readiness to face the surgery he will undergo. Older respondents are usually more prepared for surgery than younger respondents. Included in the preparation for surgery is fasting management to control thirst before undergoing surgery.

**An overview of the level of thirst in preoperative patients at the Central Surgical Installation (IBS) at Dr. H. Moch. Ansari Saleh Hospital Banjarmasin**

This study shows that the level of thirst of respondents in the mild category is 31.4%, the level of moderate thirst is 42.9% and the level of severe thirst is 25.7%. These results indicate that respondents experience more moderate thirst.

This study is in accordance with the research of which states that the number of respondents who feel the most thirst at a moderate level is 80 respondents with a percentage of 77.36% (12). Patients who experience moderate thirst can be caused by a fluid restriction policy described by 4 dimensions, namely the dimensions of intensity, thirst distress, quality, and time.

The third disorder occurs due to fluid deficit in the body. Perioperative fluid deficits arise because of pre-surgical
fasting which can sometimes be prolonged, fluid deficits that often accompany the primary disease, bleeding, surgical manipulation, and the length of surgery resulting in fluid sequestration or translocation. In the post-surgical period sometimes bleeding and/or fluid loss due to dehydration persists, which of course requires special attention. Pre-surgical fasting for 12 hours or more can result in a fluid deficit (water and electrolytes) of as much as 1 liter in adult patients. Symptoms of this fluid deficit, such as thirst, drowsiness, and lightheadedness (13).

According to the researcher, respondents who feel very disturbed by thirst due to fasting before undergoing surgery indicate that the possibility of respondents never feeling very thirsty or respondents experiencing dehydration due to preoperative fasting. For this reason, action must be taken immediately to prevent further dehydration by immediately giving drinking water to respondents after undergoing surgery.

This picture also shows that most respondents have fasted for 5-8 hours before surgery, namely 18 people (51.4%) while the least respondents have fasted for 2-4 hours before surgery, namely 7 people (20%). This study states that respondents who fasted for 5-8 hours before surgery were more than respondents who fasted for 2-4 hours before. This study is in line with research conducted by Hartanto (2016) which states that most respondents fasted for 6-8 hours before surgery.

The pre-anesthesia fasting needs of patients differ by age so that the length of pre-anesthesia fasting is determined by age group. According to the European society of anesthesiology (ESA), pediatric and adult paranesthesia guidelines 6 hours before surgery are not recommended to consume solid food and 2 hours before surgery continue to drink liquid without particles. Patients are recommended to drink water without particles with the aim of minimizing hypovolemic dehydration, hypoglycemia, and anxiety (Smith, et al, 2011).

During fasting, patients will feel thirsty, hungry, restless, sleepy, dizzy, nauseous, and vomiting. Extending the fasting time before planned surgery not only causes discomfort to the patient, but can also result in dehydration, hypovolemia, and hypoglycemia (14).

According to researchers, the length of fasting is necessary to reduce the risk of pulmonary aspiration. Perioperative pulmonary aspiration is the aspiration of gastric contents that occurs after induction, during anesthesia procedures, or immediately after surgery. Preoperative patients must pay attention to the length of fasting so that the operation can run smoothly by minimizing the risk factors for side effects of surgery.

This study shows that respondents already have the habit of drinking more than 2000 ml of water per day. This behavior is in accordance with the doctor's recommendation to consume more than 1 liter of water a day. The human body needs water to consume as much as 1 to 2.5 liters or the equivalent of 6-8 glasses every day. Consuming 2 liters of water a day helps maintain metabolic stability and body physiology (15).

According to the researcher, the respondent's habit of drinking 2 liters of water a day can help the respondent avoid dehydration during surgery because before undergoing surgery surgical patients are required to fast so that hydration is likely to occur if they do not have good water drinking habits.

Conclusions
Most of the respondents were male (65.7%), had high school education (80%), were still working (80%) and had an average age of 34 years. Most respondents had fasted for 5-8 hours before surgery, namely 18
respondents (51.4%) and had a habit of drinking more than 2000 ml of water per day, namely 13 respondents (37.1%). Most of the thirst levels experienced by respondents were in the moderate category, namely (42.9%).  

patients with elective surgery, so that they can be better prepared to fast before undergoing surgery so that there is no prolongation of preoperative fasting which causes dehydration of patients which will interfere with the smooth operation, as suggested by the American Society of Anesthesiologist (ASA) for a minimum of preoperative fasting 2 hours before surgery.

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