

## **Nursing Care for A Family with Hypoglycemia by Giving Honey Therapy to the Family of Mr. D in Pinang Merah RT 09 Working Area of the Kenali Besar Public Health Center of Jambi City**

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### **Abstract**

Background: Hypoglycemia is characterized by a decrease in blood glucose levels <60 mg/Dl. The warning value for hypoglycemia in hospitalized patients is defined as blood glucose <70 mg/dL. The benefits of honey are many, namely as an antimicrobial, helps heal wounds, and as an antioxidant and carbohydrates with a high glycemic index will trigger a high increase in blood glucose as well. Method: used is a case study with data collection techniques through observation, interviews and physical examination with the superior intervention of consuming pure honey to increase blood glucose in hypoglycemic patients. Results: Analysis shows that there is a nursing diagnosis, namely Ineffective Family Health Management. To prevent the risk of complications, blood glucose control was carried out by administering pure honey therapy for 5 days. The result was that blood glucose increased on the 3rd day of pure honey intervention. The results were before 66 mg/dl. became 101 mg/dl 4th meeting and 2nd intervention before 90 mg/dl became 106 mg/dl and 5th day of 3rd intervention before treatment 106mg/dl became 144 mg/dl. Conclusion: consuming pure honey can increase blood glucose levels.

**Keywords:** Hypoglycemia, Pure Honey, Family Nursing

### **Introduction**

A family is a small unit of society consisting of a head of household and several people who live and depend on each other in one place. A family is a group of people bound by marriage, birth and or adoption that aims to create, maintain culture and enhance the physical, mental, emotional and social development of the family.<sup>3</sup>

Families are members of a household consisting of several people by marriage, blood ties or adoption. The family has a family care function that can take care of family members whose health is disturbed, one of which is the proper handling of the illness suffered, not only that, the family is also a support for the client, with the fast and proper handling carried out by the family, it can prevent death and the worst conditions in people with hypoglycaemia.<sup>4</sup>

Hypoglycemia is a condition in which blood glucose levels are very low. Hypoglycemia is an emergency and requires prompt and appropriate treatment, as it can cause serious complications such as decreased consciousness, cognitive impairment, cardiovascular disease, and even brain failure and death. Therefore, management of hypoglycemia must be carried out quickly and appropriately. The primary treatment for hypoglycemia patients is to restore blood glucose levels as quickly as possible with the administration of dextrose.<sup>5</sup>

Hypoglycemia is more common in type 1 diabetes mellitus (DM), with an incidence of 10%-30% of patients per year and a mortality rate of 3%-4%, while in type 2 diabetes mellitus the incidence is 1.2% of patients per year. The average incidence of hypoglycemia increases from 3.2 per 100 people per year to 7.7 per 100 people per year with insulin use. Other research indicates that hypoglycemia occurs in 30% of patients taking oral hypoglycemic drugs such as sulfonylureas. As an acute complication of type 2 diabetes mellitus, hypoglycemia is most often caused by the use of insulin and sulfonylureas.<sup>4</sup>

Hypoglycemia is a condition where blood glucose levels are very low. It is estimated that about 2-4% of hypoglycemia deaths are related to type 1 DM. Hypoglycemia is also common in type 2 DM with a prevalence of 70-80%. However, hypoglycemia can occur spontaneously without being related to diabetes mellitus either type 1 or 2. Hypoglycemia is an emergency condition and requires rapid and appropriate treatment, because it can cause severe complications such as decreased consciousness, cognitive impairment, can trigger cardiovascular disease, and even cause brain function failure and death. Therefore, the management of hypoglycemia cases must be carried out quickly and appropriately, the main treatment carried out in hypoglycemia patients without loss of consciousness can be done by giving drinks containing glucose such as honey.<sup>14</sup>

Honey is a syrupy liquid produced by honeybees. Honey is produced by two types of bees, namely wild bees and cultivated bees. Honey is produced by two types of bees, namely wild bees and cultivated bees. Apart from being a food and beverage sweetener, the benefits of honey are

numerous, namely as an antimicrobial, aids in wound healing, and as an antioxidant. Carbohydrates with a low glycemic index only trigger a slight increase in blood glucose levels, while carbohydrates with a high glycemic index will trigger a high increase in blood glucose as well. Consuming honey that has a low glycemic index certainly has the advantage of physiological effects.<sup>8</sup>

Based on the results of interviews conducted in the Bagan Pete sub-district area of Pinang Merah Housing RT 09, where of the five families interviewed there were two families whose family members experienced hypoglycemia and the condition had been experienced several times but the family considered that the condition experienced was not dangerous so they only gave some candy and advised them to sleep. The results of interviews with other families said that they did not know that they had hypoglycemia because they had never checked their blood sugar before.

Referring to the above phenomenon, the authors are interested in describing the problem in the form of Ners Final Scientific Work (KIAN) with the title Nursing Care for Families with Hypoglycemia in the Kenali Besar Health Center Work Area, Jambi City.

## **Methods**

### **Observation and Participation Techniques**

The author collected data through the senses of sight and hearing. This observation was conducted through direct observation of the client, which included changes in the patient's verbal and nonverbal responses.

### **Interview Techniques**

Data was collected through interviews, questioning patients about the signs and symptoms of hypoglycemia and the causes of hypoglycemia. Data were supplemented by data collection through patient visits.

### **Documentation**

After performing guided imagery therapy on a patient, the author always documents the procedure as proof. This documentation can take the form of photographs, observation sheets, and videos.

### **Implementation of nursing care for hypoglycemia patients**

The author applied honey therapy to patients with hypoglycemia. The author performed guided imagery therapy for four days, once daily for approximately 20-45 minutes.

## **Data analysis**

Data analysis is conducted from the time the researcher is in the field, through data collection, until the data is collected. Data analysis is conducted by presenting facts, then comparing them with theory, and then presenting them in a discussion opinion.

## **Implementation Stage**

### **Licensing**

Permission starts from an assignment letter from the campus made by the Head of the Nursing Professional Study Program which has been signed by the Dean of the Faculty of Medicine and Health Sciences, Jambi University addressed to the head of the Kenali Besar Health Center, to take cases on managed patients in the Kenali Besar Health Center work area, the author determines the patient to be a managed case that will be taken as the subject of the Final Scientific Work of Ners (KIAN). The author carried out the service for 4 days, namely from November 25 to November 29, 2024.

### **Stages of Nursing Care**

Assessing families with hypoglycemia in the work area of the Kenali Besar Health Center, Jambi City. Formulate family nursing diagnoses with Hypoglycemia in the Kenali Besar Health Center working area of Jambi City. Developing family nursing planning with Hypoglycemia in the working area of the Kenali Besar Jambi City Health Center. Carry out family nursing interventions with Hypoglycemia in the working area of the Kenali Besar Jambi City Health Center. Evaluate families with Hypoglycemia in the working area of the Kenali Besar Health Center, Jambi City.

## **Results**

After the application of family nursing care to the family of Mr. D with one of the family members, Mrs. A suffering from hypoglycemia in the working area of the Kenali Besar Health Center in Jambi City on November 25 to 29, 2024 for 1 visit a day. D with one of the family members, Mrs. A, suffering from hypoglycemia in the Kenali Besar Health Center working area of Jambi City on November 25 to 29, 2024 for 1 visit a day, then in this discussion chapter the author will describe and describe the suitability and gaps that exist between theory and case. The stages of discussion are in accordance with the stages of nursing care starting from assessment, formulating nursing diagnoses, nursing interventions, and nursing implementation and evaluation.

Nursing assessment is defined as an examination or review of the situation and conditions experienced by the patient for the purpose of formulating nursing diagnostic problems. In the nursing assessment process there is a systematic method of examining human responses to health problems and making nursing plans that aim to overcome these problems.<sup>23</sup>

The assessment was carried out on Mr. D's family which consisted of this family father, mother and 2 female children. Mr. D's wife Mrs. A is 46 years old and has the first daughter named Ms. W aged 46 years and the second child named An. W is 46 years old and the second child is named An. R aged 13 years, Mr. D's family is of Malay ethnicity and Muslim religion. Mr. D's family is of Malay ethnicity and Muslim religion, the economic status of Mr. D's family is categorized as simple with the Spouse. The stage of family development with early adulthood children for the health problems of Mr. D's family and his children did not experience problems and Mrs. A after checking was found that Mrs. A's blood glucose was 40 mg/dl which meant that Mrs. A had Hypoglycemia. Mrs. A said she rarely checked her health and had no previous history of Diabetes mellitus and other diseases, Mrs. A said she had previously been hospitalized with low blood glucose and accompanied by diarrhea and vomiting but it had been a long time ago. Mrs. A said she did not like sweet foods or sweet drinks and Mrs. A often forgot to eat because of doing homework.

Hypoglycemia is a condition where the blood glucose level in the blood is less than 70 mg/dl. It can occur when the use of glucose from the blood by the brain, red blood cells, kidney marrow and insulin-sensitive tissues such as muscle exceeds the delivery of glucose to the circulation from dietary carbohydrates and manufactured glucose. Under physiological conditions, glucose production is high when needed. Hypoglycemia can occur when this capacity falls absolutely or relatively below glucose utilization.

Based on the theory above and in accordance with the results of the assessment conducted on Mr. D's family, especially on Mr. D's wife. D, especially in Mr. D's wife, Mrs. A, who is 46 years old with hypoglycemia at the time of the assessment conducted by the researcher, Mrs. A complained that she was easily tired, cold sweat and trembling increased if she did excessive activity. And blurred vision when sleeping, Mrs. A said she had felt dazed and fainted. Researchers conducted a physical examination to find anemic conjunctiva, pale appearance, from the results of the examination of vital signs obtained Ny.A's blood pressure was normal with the results of

130/80 mmHg, pulse 90 x/I, breathing and body temperature in the normal range and conducted a blood sugar test while 40 mg/dl.

## **Discussion**

Assessment is very important in the family of Mr. D with the problem of Hypoglycemia that needs to be considered during the assessment is that if the family does not know what hypoglycemia means, causes, prevention, signs and symptoms and management, eating is still one and uncontrolled. On physical examination, patients with hypoglycemia problems experience physical changes, including appearing confused when asked about hypoglycemia, the results of the current blood glucose level showed 40 mg/dl.

In patients with hypoglycemia problems will experience several nursing problems found in case reviews are Ineffective Family Health Management (D.0115) related to the Complexity of the Care Program with Hypoglycemia. and lack of knowledge related to the family's inability to recognize health problems.

The nursing interventions presented in the literature review and case review are similar but each intervention still refers to the objectives, outcome criteria and time criteria. Nursing implementation is carried out in a coordinated and integrated manner for the implementation of diagnoses in cases. The results of the implementation of giving muri honey to increase blood glucose levels increased gradually in the first intervention before 66 mg/dl after intervention to 101 mg / dl in the second intervention which was previously 90 mg/dl blood glucose to 122 mg/dl and the last intervention before treatment 106 mg/dl to 144 mg/dl.

Evaluation was carried out by the author with a method of 5 home visits with the hope that the author could find out the developments that occurred in the patient at any time. At the end of the evaluation, all goals were achieved due to good cooperation between the patient and the family.

## **Conclusion**

Based on the evaluation of the last day, the client utilizes health services by mentioning the benefits of visiting health services and the nearest health facilities that can be used. Mrs.A said the types of health services are primary, secondary, and tertiary health services. Examples such as hospitals, health centers and clinics, Mrs.A said the benefits of coming to health services are for

health checks and treatment, Mrs.A and her family said they would choose the health center as the family health facility to visit.

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