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Primary emergency survey circulation hyperglycemia with adequacy of fluid needs and diet compliance in patients with diabetes mellitus: Case study

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Abstract
Emergency in patients with diabetes mellitus is a life-threatening condition associated with acute complications of diabetes mellitus, so it is necessary to get immediate and appropriate treatment. Objective: Carry out emergency nursing care for patients with diabetes mellitus employing a primary survey, circulation, and secondary survey so that glucose levels in the blood and level of consciousness, as well as urine production, are stable. Methods: This case study uses a descriptive design for two patients with the same diagnosis through an intensive independent and collaborative action-nursing-care-process approach in Diabetes Mellitus patients. Results: Blood glucose levels, stable urine production, increased awareness, improved patient and family anxiety levels, and patients and families who can understand the dietary needs of diabetes mellitus patients. Conclusion: The importance of emergency room nurses in providing fast, responsive, and alert services and have a caring attitude towards patients to overcome anxiety and good listeners always provide support that can help the patient recover.

Keywords: emergency, primary survey, hyperglycemia, diabetes mellitus

Introduction

The Emergency Room is a place of service in a hospital that will provide initial and final treatment for patients who enter the hospital or can be treated at other health services who are sick or have life-threatening injuries [1]. An emergency is defined as life-threatening, while an emergency is an action that must be taken immediately to eliminate the threat to the victim's life. Hence, an emergency is a life-threatening condition that must be treated immediately to avoid disability or death for the victim [2]. The Emergency Room is a hospital service that functions to receive, stabilize, and be able to manage patients who need immediate emergency treatment in both daily and disaster situations [3].

Nursing, according to Nightingale, inspires us that life will be meaningful if we do something for others. This philosophy should be rooted in the profession of a nurse, namely, "helping others." Facing opposition and rejection of the career he tried to choose. Nightingale struggled to continue studying through education to become one of the women who sparked social reforms that the world knew very well. Nightingale also recorded history in her service to help victims of the Crimean War in 1854; Nightingale started voicing the rights of others by emphasizing that war victims must receive adequate care services with attention to sanitation, clean wound care, and adequate air ventilation. It is where it is believed that modern nursing began to be known [4].

Using a lamp (which is now a philosophical symbol of nursing), Nightingale, with a passion helping spirit, and a sincere intention to do good for others, went around at night when everyone was fast asleep just to check on the condition of the soldiers who died in the war. Sacrifices that other people did not make at that time touched the heart and provided unpaid comfort to the soldiers who were victims of war. Nightingale reduced mortality from 42% to 2% at that time. A result that is not reciprocated by the material.

The concept of emergency nursing (Emergency Nursing) is a comprehensive nursing service that will be provided to patients with acute injuries or illnesses that will threaten life. In contrast, emergency nursing is a professional nursing service that will be provided to patients with urgent and crisis needs [5]. An emergency is a condition that experiences a threat of danger that results in further damage and must be handled immediately. Emergency services are actions needed by patients in emergency situations immediately to save lives and prevent death [6]. A health service facility is a place or tool needed for promotive, preventive, curative, and rehabilitative health services carried out by the central government, region, and certain communities [7]. Triage is a process that can sort patients according to the severity of injury or pain and will prioritize treatment according to the availability of resources for the patient to survive [8].

Diabetes mellitus, commonly called diabetes, is a dangerous disease in the body that results in disturbances in insulin secretion, insulin hormone that does not work properly, or both [9]. This disease states the appearance of typical symptoms such as polyphagia, polydipsia, and polyuria can characterize the disease. They experience weight loss [10]. Diabetes mellitus needs to be taken seriously; diabetes mellitus cannot be controlled and can cause complications such as damage to the eyes, kidneys, blood vessels, nerves, and heart. Diabetes Mellitus emergency is a life-threatening condition associated with acute complications of diabetes mellitus even though it needs immediate help. Diabetic mellitus emergencies include hypoglycemia and hypoglycemia crises such as diabetic ketoacidosis, hyperosmolar hyperglycemic state, and lactooxidosis coma [11].

It is estimated that 463 million cases of this disease affect people aged 20-79 worldwide who suffer from diabetes mellitus, or the equivalent of 9.3% of the same-age population, in 2019. Around the age of 65-79, it is estimated

that there will be 19.9% in 2019, predicted to increase to 20.4% in 2020, and will increase to around 20.5% / in 2045. The prevalence of diabetes occurs in 2019 as many as 9% of women and 9.6% of men. The number is predicted to increase to 578.4 million in 2030 and 700.2 million in 2045 [12]. Countries with the highest number of diabetes mellitus sufferers in 2019, ages 20-79 years, are China, India, and the United States. Indonesia has been ranked 7th out of 10 countries with diabetes mellitus, with 10.7 million people suffering from diabetes mellitus. The Southeast Asian region, where Indonesia is included, is ranked third with a prevalence of diabetes of 11.3% [13]. Indonesia is one of the countries in Southeast Asia that can contribute to the prevalence of diabetes mellitus in Southeast Asia [14].

The prevalence of diabetes mellitus in Indonesia is based on a doctor's diagnosis; the population aged ≥15 years is around 2%. Almost all of these provinces showed an increase in prevalence in 2018, except for the province of East Nusa Tenggara, around (0.9%). Some provinces experience the highest prevalence, namely DKI Jakarta at around (3.4%), East Kalimantan at around (3.1%)), DI Yogyakarta at around (3.1%), and North Sulawesi at around (3%). Based on gender, the prevalence of diabetes in 2018 was 1.2% for men and around 1.8% for women [15]. Diabetes Mellitus is a non-communicable disease with the highest proportion in Indonesia and the sixth highest cause of death in this country. The prevalence of people with diabetes mellitus in East Jakarta is as much as 32,400. East Jakarta is ranked second for the most diabetes mellitus sufferers after South Jakarta [16].

Emergency management in diabetes mellitus is addressing hypoglycemia and finding the cause. Assessment of the patient's condition as in general condition, level of consciousness, vital signs, measurement of blood sugar concentration, and nutritional history that will be given to the patient and carried out according to the management of hypoglycemia can be done immediately [17]. It can be emphasized in hypoglycemia therapy, namely preventing recurrent hypoglycemia, and patients can understand and be able to identify clinical manifestations and insulin treatment and can adjust diet and exercise activities to be carried out to prevent hypoglycemia [18]. The nursing problem taken is the instability of blood glucose levels. Circulation is a study that pays attention to signs of bleeding. Shock is a sign that the patient is experiencing hypovolemia or blood loss in large quantities. Breathing is a study that focuses on a breath to assess the adequacy of meeting the body's oxygen needs.

The need for fluids is a part of the basic human needs physiologically, which will have a large proportion in the body. Oxygen is a necessity needed by life because oxygen is important in the body's metabolic processes. Pharmacological therapy in patients with diabetes mellitus must follow the doctor's recommendations to monitor blood sugar levels regularly, at least every six months. Patients with diabetes mellitus are assessed for treatment and lifestyle to control adherence of diabetics to lifestyle modifications. With this assessment, it is expected that patients with diabetes mellitus will become healthier and comply with pharmacological management so that their disease is more controlled and controlled.

Pharmacological therapy, namely therapy that is given together with eating and exercise (healthy lifestyle) arrangements. This therapy consists of oral drugs and injection forms (insulin), namely Sulfonylureas, Glinid, Biguanid, Glucoxidase Inhibitors (Acarbose), Thiazolidinediones, Dipeptidyl peptidase four inhibitors (DPP) - 4). Non-pharmacological therapy in diabetes mellitus is to be carried out by giving an elective and consistent therapy in a regimen tied to patient compliance to create optimal therapy. Anti-diabetic therapy includes the following [19] how to identify and reduce risk factors such as risk factors that cannot be modified, family history of diabetes, age, history of giving birth to a baby with a baby weighing >4000 grams, lack of physical activity, lifestyle modification, weight loss program body, healthy diet, physical exercise, and stop smoking.

The role of the nurse [20] consists of the role of a provider of nursing care. Nurses can carry out this role by paying attention to the state of basic human needs needed by providing nursing services by providing the nursing process. The role of a patient advocate is carried out by a nurse who can assist patients and families in interpreting information from service providers or other information, especially in making informed consent for nursing actions to be given to patients, and can also play a role in maintaining and protecting patient rights. includes the right to the best possible service, the right to information on his illness, and also the right to privacy.

The role of this educator can be carried out to assist patients in increasing the level of health knowledge, disease symptoms, and also the actions to be given, even though there are changes in the behavior of patients after health education is carried out. The role of the coordinator is to direct, plan, and organize health services from the health team to provide health services that can be directed and follow the needs of the patient. The role of the collaborator, namely the role carried out because the nurse works through a health team consisting of a doctor, physiotherapist, nutritionist, and others, can attempt to identify nursing services so that it is necessary to include discussion or exchange of opinions in determining the next form of service.

The role of this consultant is to act as a consultant for problems or appropriate nursing actions so that they are given. The reformer role is a role that can be carried out by planning, cooperating, and systematic changes and also directed at the method of providing nursing services. The nurse's role must be carried out by sharing so the patient can feel comfortable and believe in what we are doing [21].

Christian values at the Universitas Kristen Indonesia, including humility, can be applied to health services. It means that nurses must be humble in caring for patients. Sharing and caring (Sharing and Caring) where nurses must share and care in carrying out nursing care so patients can recover. Discipline (discipline) is where nurses must be disciplined in doing their work. Professional (professional) where nurses must be professional in nursing care so that patients can trust what they will give. Responsible (responsibility), where the nurse must act on the patient so that the patient feels comfortable and trusting. Integrity (integrity) is where the nurse must feel what the nurse thinks is felt by the nurse, and that is what she does.

So that Christian values can help the healing process in patients by providing nursing care; in this case, the author will apply Christian values in this study with a humble attitude that will give others joy; this sharing and caring attitude can create a sense of belonging, empathy, this disciplined attitude can create appropriate processes and

results; a professional attitude can create a sense of satisfaction in providing nursing care to patients; a responsible attitude can create mutual trust between nurses and patients; and an attitude of integrity is very important in being consistent in the actions they take.

With these UKI values, it can create services that can help heal patients. Caring is interpreted as caring, so nurses must care for fellow patients to carry out nursing care properly. Caring, in general, can be interpreted as the ability to be dedicated to others, vigilant supervision, and a feeling of empathy for others. A caring attitude toward nurses must create a comfortable atmosphere and have an attitude of sharing and caring for patients [22].

According to the author, caring can help the patient's healing by providing touch, psychological and spiritual support. With caring like the Author has a verse as the foundation of the Bible taken from the Bible, Philippians 4:6, which states that "Do not worry about anything, but state in all things your wishes to God in prayer and supplication with thanksgiving," the author takes research on diabetes mellitus because one of his family suffers from diabetes mellitus. Hence, the author wants to learn about the disease and its causes.

Based on the background above, this writer can describe a case study entitled "Emergency Circulation Hyperglycemia with Adequacy of Fluid Needs and Diet Compliance in Diabetes Mellitus Patients in the Emergency Room of TK II Hospital Moh. Ridwan Meuraksa Jakarta." From the background above, the authors formulate the following problem: "How to manage patients with emergency Circulation Hyperglycemia With Adequacy of Fluid Needs and Diet Compliance in Diabetes Mellitus Patients in the Emergency Room of RS TK II Moh. Ridwan Meuraksa Jakarta? The aim of the research is to gain real and clear experience by approaching the nursing care process in "Emergency Circulation Hyperglycemia With Adequacy of Fluid Needs and Diet Compliance in Diabetes Mellitus Patients in the IGD RS TK II Moh. Ridwan Meuraksa Jakarta"

Research Method

The research method implemented in this study is qualitative with a case study design. This study aims to describe or explain an important event [23]. This research was conducted in the emergency room of TK II Moh Hospital. Ridwan Meuraksa Jakarta in May 2022. The focus of the case study in this scientific paper is the management of circulation and breathing emergencies by meeting the demands for fluids and oxygen in patients with diabetes mellitus through observation, physical examination, and patient interviews with the actions taken by the authors and nurses, and doctors in the emergency room. This case study was carried out individually by observing the actions performed on the patient from when the patient entered the emergency room to moving to an inpatient or outpatient room. The research instruments used in data collection were: a) nursing kit (sphygmomanometer, stethoscope, thermometer, and oxygen saturation); b) equipment for oxygen needs (nasal cannula, simple mask, rebreathing mask, and nonrebreathing mask); and level 2 personal protective equipment (PPE) (gloves, surgical masks, gowns, eye protection such as goggles or face shields and also head covers), informed consent. The stages that were passed in this study were the research licensing stages, the preparation stages, the data collection stages, and the research report preparation stages. This data analysis can be carried out by descriptive analysis, namely by providing a brief description and presenting textually with facts -facts used in narrative texts. This interpretation is a part of the processing in concluding the analysis results factually.

Result and Discussion

This case study data was collected from study material obtained through observation, physical examination, direct interviews with patients and their families, and medical and nursing records. The assessment of patient 1 and patient 2 begins with the patient's identity in the form of name, gender, age, religion, marital status, education, occupation, past medical history, family medical history and current complaints, and address of residence in patient 1 and patient 2.

Table 1: Identity of Patient 1 and Patient 2

Patient identity	Patient 1	Patient 2
Medical Record Number	442502	446161
Medical diagnosis	DM type II	DM type II
Name	Mr. S	Mr. J
Gender	Male	Male
Age	46 years	56 years
Religion	Islam	Islam
Marital status	Married	Married
Education	Senior High School	Senior High School
Occupation	Indonesian National Armed Forces Army	Civil Servants Headquarters and the Ministry of Defense
Triage	Not Serious, not emergency, or Priority 3 with a green symbol	Non-emergency or Priority 2 with a yellow symbol
Main complaint	Urinate 10 times at night; body weak	Vomiting since one day before entering the hospital, and weak body, cold sweat
Chronology of complaints	Patients complain of weakness and frequent urination ± 10 times at night; this is felt before the fasting month of Ramadan, experiencing weight loss of 5-6 kg in the last ten days.	The patient complained of weakness, had felt nauseous and vomited since the day before entering the hospital, and had difficulty communicating; diabetes medication was not taken.
Orientation	The patient can mention the existence of place and time	The patient is unclear when speaking but can mention the whereabouts, place, time
Past medical history	Denied	Hypertension, Stroke, and Diabetes since 2020

Based on data on patient 1's condition, it can be concluded that patients with non-emergency criteria or priority 3 are conditions where patients do not need immediate help, are not life-threatening, and do not cause disability. In contrast, in patient 2's condition, it can be concluded that patients with non-emergency criteria or priority 2 is a patient condition that is life-threatening but does not require emergency treatment or there is still time for treatment. If not treated immediately, the condition will become an emergency or priority 1.

Table 2: Assessment of the Primary and Secondary Survey of Patients 1 and 2

Primary survey review	**Patient 1**	**Patient 2**
Airway	Patent airway, no airway obstruction, vesicular breath sounds, no additional breath sounds such as wheezing and rhonchi, and no other complaints; patient 1 can be given concluded clear airway.	Patent airway, no airway obstruction, vesicular breath sounds, no additional breath sounds such as wheezing and rhonchi, and no other complaints; patient 1 can be concluded airway is clear.
Breathing	Symmetrical chest movement, normal breathing rhythm, regular breathing pattern, no chest muscle retraction, and no shortness of breath. Respiratory frequency 19 x/minute; patient 1 can be concluded to be breathing clear	Symmetrical chest movements with fast breathing rhythm, regular breathing pattern, then no chest muscle retraction, respiratory rate 28 x/minute with 97% oxygen saturation, and no other complaints; in patient 2, it can be concluded breathing clear
Circulation	The pulse is palpable; there are no signs of cyanosis, CRT (Capillary refill time) <2 seconds, no bleeding, complaints of weakness, no appetite, frequent urination more than 10 times at night, weight loss of 5-6 kg at the past month. BP 136/82 mmHg, pulse rate 75 x/minute, temperature 36,3ºC, blood sugar during (GDS) 563 mg/dl, elastic skin turgor, skin color brown. In patient 1, it can be concluded that the circulation is unclear.	The patient's pulse was palpable; there were no signs of cyanosis, CRT (Capillary Refill Time) <2 seconds; no bleeding; the patient complained of weakness and vomited 1 time before entering the hospital; the patient had not taken diabetes medication for a long time. BP 145/86 mmHg, pulse 107 x/minute, temperature 36,5ºC, blood sugar during (GDS) 382 mg/dl, elastic skin turgor, warm skin temperature, brownish skin color. In patient 2, it can be concluded that the circulation is unclear.
Disability	Good verbal response, level of consciousness composmentis pupillary reaction isochor, light reflex +/+, no other complaints, patient 1 disability clear.	Good verbal response, with composmentis level of awareness, pupillary reaction isochor, light reflex +/+, no other complaints patient 2 disability clear
Exposure	There were no deformities, contusions, no signs of abrasion, penetration, lacerations, or edema in the patient, and no additional complaints; in patient 1, it was concluded that the exposure was clear.	There was no deformity, contusion, abrasion, penetration, or edema in patient 2, and it was concluded that the exposure was clear.
Secondary survey assessment		
Current medical history Allergy Medication Last meal and drink Causing event Vital sign	The patient said he was worried and felt afraid because he could not work at the office. The patient has no food or drug allergies. No use of drugs The patient ate and drank his last meal, rice, and side dishes, at 04.00 It occurs suddenly when the patient is working. BP 136/82 mmHg, pulse 75 x/minute, temperature 36,3ºc, respiratory rate 19 x/minute, oxygen saturation 97%, Height 164 cm, Weight 71 kg, BMI (Body Mass Index) 26,3 (Obesity I), GDS 563 mg/dl. Inpatient 1 on the secondary survey was not clear.	The patient said he was worried and worried because he could not work as a member of the Indonesian National Armed Forces Headquarters. The patient has no food or drug allergies There are medicines from the doctor, but I forgot the name of the medicine The patient ate and drank his last meal, namely rice and side dishes, at 03.00 WIB Occurs suddenly when the patient is working BP 145/86 mmHg, pulse 107 x/minute, temperature 36,5ºc, respiratory rate 28 x/minute, saturation 98%, Height 173 cm, Weight 80 kg, BMI (Body Mass Index) 26,6 (Obesity I), CBS 382 mg/dl. Inpatient 2 on the secondary survey was not clear.
Head to toe		
Head and neck	Inspection: Symmetrical head shape, clean scalp, no inflammation, tumors or scars, hair evenly distributed, and gray hair Palpation: There is no lump, bone crepitation in the head, distended jugular veins in the neck	Inspection: The head shape is symmetrical, the scalp is clean, and no inflammation, tumors, or hair scars are spread evenly. Palpation: There is no lump, no bone crepitation in the head, and distended jugular veins in the neck.
Chest	Inspection: Symmetrical development and movement of the chest, Palpation: No tenderness; vocal fremitus felt the same in both lung fields Percussion: Resonant percussion breath sounds (Sonor)	Inspection: Symmetrical development and movement of the chest, Palpation: There is no tenderness, and vocal fremitus is felt equally in both lung fields Percussion: Resonant percussion breath sounds (Sonor)

	Auscultation: No additional breath sounds, vesicular breath sounds	Auscultation: No additional breath sounds, vesicular breath sounds
Abdomen	Inspection: Abdominal shape is symmetrical; there are no ascites Palpation: No tenderness in the abdomen, no lumps. Percussion: on percussion examination of the tympanic abdomen Auscultation: Bowel sounds 18x/minute	Inspection: Abdominal shape is symmetrical; there are no ascites Palpation: No tenderness in the abdomen, no lumps Percussion: on percussion examination of the tympanic abdomen Auscultation: Bowel sounds 19x/minute
Pelvis	Inspection: There is no cyanosis and swelling Palpation: No pelvic pain	Inspection: There is no cyanosis and swelling Palpation: No pelvic pain
Upper or lower extremities	Inspection: There was no rash on the skin and abnormalities in the upper and lower extremities Palpation: Skin turgor is elastic, the left and right hands can still be moved properly and can resist the given resistance, and the left and right legs have no abnormalities	Inspection: There was no rash on the skin and abnormalities in the upper and lower extremities Palpation: The acral feels warm, the skin turgor is elastic, the left and right hands can still be moved properly and can resist the resistance given, and the left and right legs have no abnormalities
Back	Inspection: The shape of the back symmetrical Palpation: There is no abnormality on the back	Inspection: The shape of the back symmetrical Palpation: There is no abnormality on the back
Neurological	Examination 12 cranial nerves are functioning properly.	Examination 12 cranial nerves are functioning properly.

The primary survey is an appropriate and systematic assessment used to identify and recognize life-threatening conditions or conditions in patients as quickly as possible. This primary survey can be used for inspection, auscultation, palpation; percussion assessment approaches [24]. Problems that can be life-threatening are airway, breathing, circulation, and consciousness, identified and evaluated within minutes of the patient's arrival at the emergency department. In patient 1 and patient 2, samples were taken for swab testing for Covid-19 antigen, routine blood, complete urine, and random blood sugar. A nursing diagnosis is a statement describing a problem with the patient's health status, either actual or potential, and is determined based on the analysis and interpretation of data on the assessment results. It identifies and focuses on enforcing nursing problems in patients according to specifications [25]. Nursing planning is a stage that describes the nursing actions performed on patients according to their needs based on their nursing diagnosis. This stage allows nurses, patients, families, and those closest to the patient to formulate a nursing action plan to address the patient's problems. [26]

Table 3: Nursing Interventions for Patients 1 and 2

Nursing diagnoses	Results Criteria	Intervention
	Circulation	
Instability of Blood Glucose Levels	After nursing interventions, it is hoped that the instability of blood glucose levels can be resolved with the following criteria: 1. Drowsiness decreased 2. Fatigue/lethargy decreased 3. Dry mouth decreased 4. Improved blood glucose levels: GDS 1:256 mg/dl, GDS 2: 225 mg/dl 5. The amount of urine improves:	Hyperglycemia Management Observation 1. Identify possible causes of hyperglycemia 2. Identify situations that cause insulin requirements to increase 3. Monitor blood glucose levels 4. Monitor signs and symptoms of hyperglycemia 5. Monitor fluid intake and output Therapeutic 6. Give oral fluid intake 7. Consult a doctor if signs and symptoms of hyperglycemia persist or worsen Education 8. Avoid exercise when the blood glucose level is over 250 mg/dl. 9. Suggest self-monitoring of blood glucose levels 10. Encourage adherence to diet and exercise 11. Teach diabetes management Collaboration 12. Insulin administration collaboration 13. Collaboration administration of peripheral intravenous fluids
Secondary Survey Ansietas	After the nursing intervention is carried out, it is expected that the anxiety level can be resolved with the following criteria: Verbalization of worry as a result of the conditions faced decreased Urinary pattern improves	Anxiety Reduction Observation 1. Identify when anxiety levels change 2. Identify decision-making abilities 3. Monitor for signs of anxiety Therapeutic 4. Create a therapeutic atmosphere to build trust 5. Understand situations that create anxiety

		6. Listen very attentively 7. Use a calm and reassuring approach Education 8. Inform factually regarding diagnosis, treatment, and prognosis 9. Encourage expressing feelings and perceptions 10. Practice relaxation techniques

Nursing implementation is a nurse's stage in applying nursing interventions in the form of nursing actions used to help patients to achieve predetermined goals [27].

Table 4: Implementation of Nursing in patients 1 and 2

Implementation of nursing in patients 1 and 2			
	Patient 1		**Patient 2**
09.10	Accepting new patients, determining triage, and identifying patient identities Results: the patient is categorized as non-critical and non-emergency with the initials Tn.S, 46 years old, male, occupation of the Army, Javanese ethnicity, last education in high school, marital status is married Review medical history	14.23	Accepting new patients, determining triage, and identifying patient identities Results: the patient is categorized as a non-emergency emergency with the initials Mr. J, 56 years old, male sex, occupation of civil servant Headquarters of the Indonesian Armed Forces Ministry of Defense, Javanese ethnicity, last education is high school, marital status is married Review medical history
09.12	Results: the patient complained of weakness and frequent urination approximately ten times at night. The patient has lost 5-6 kg of weight in the last ten days. Assess the patient's anxiety.	14.25	Results: the patient complained of weakness and vomiting 1 day before entering the hospital and had not taken diabetes medication for a long time. Assessing anxiety in patients
09.15	Result: the patient is anxious because he cannot work Teach deep breathing relaxation techniques to reduce anxiety	14.30	Result: the patient is anxious because he cannot work Assign a semi-Fowler's position
09.20	Results: patients can understand and seem more relaxed after doing deep breathing relaxation techniques independently Assign a semi-Fowler's position	14.45	Result: the patient is comfortable with his position Measure TTV
09.35	Result: the patient is comfortable with his position Measure TTV	15.00	Result: BP 145/86 mmHg Heart rate 107 x/minute Respiratory Frequency 28 x/minute Oxygen saturation 99%, Temperature 36,5º C
10.00	BP result 136/82 mmHg Heart rate 75 x/minute Respiratory Frequency 19 x/minute Oxygen saturation 98%, Temperature 36,3ºC Perform a complete ECG examination		Perform a complete ECG examination
10.10	Result: normal sinus rhythm Does a GDS check with a glucometer?	15.10	Result: normal sinus rhythm Do a GDS check with a glucometer
10.20	Result: 563 mg/dl Taking venous blood samples for routine	15.20	The current Blood Sugar result is 382 mg/dl Took a venous blood sample for routine
10.30	blood laboratory tests, temporary blood sugar, complete urine Results: GDS 563 mg/dl, HB 14.6 g/dl, Leukocytes: 8.8 thousand/uL, Hematocrit: 42%, Platelets: 236 thousand/uL, clear yellow color, pH 6.0, specific gravity: 1020, protein: negative, glucose: positive 2 (++), ketones: negative, urobilinogen: normal, bilirubin: negative, blood: negative, nitrites: negative, leukocytes: negative, erythrocytes:/0-1, leukocytes: /1-2, cylinder: negative, epithelium: positive, crystal: negative, fungus: negative, bacteria: negative Perform an infusion with 0.9% Nacl fluid with 20 drops per minute in the left hand.	15.30	blood tests. Results: Hemoglobin 14.6 g/dl, Leukocytes 18.1 thousand/uL, Hematocrit 40%, Platelets 316 thousand/uL. Perform an infusion with 0.9% Nacl fluid with 20 drops/minute in the left hand.
10.35	Result: drip smoothly and no signs of phlebitis Give Metformin 500 mg and Glimepiride 4 mg orally	15.35	Result: drip infusion went well, no signs of phlebitis Administering Novorapid insulin 10 units subcutaneously Results: the patient has been given insulin therapy correctly in the left arm
10.50	Results; the medicine has been taken, and there is no vomiting	16.10 16.30 16.45 17.00 17.15	Give Omeprazole 20 mg orally Result: the drug has been taken Observing the response after the patient took Omeprazole 20 mg and Ondansetron 4 mg Results: the patient said there was no vomiting and nausea Observing the patient after being given Novorapid insulin therapy ten units by examining blood sugar checks Result: GDS 225 mg/dl Give Cefriaxon 2 gr Results: the drug has been given intravenously Observing the patient's response after being

11.00	Checking blood sugar while the patient is taking Metformin 500 mg and Glimepiride 4 mg Result: GDS 256 mg/dl Recommend diet food for diabetic patients with 25-30 calories per kg of ideal body weight.	17.30	given the drug Cefriaxon 2 gr per-intravenously Results: the drug has been given, and there are no signs of allergies Recommend eating diet food for diabetic patients with 25-30 calories per kg of ideal body weight
11.30	Result: the patient can understand what is recommended and explained the diet Observing vital signs Results: BP 120/70 mmHg, pulse rate 80x/minute, respiratory rate 20 x/minute, oxygen saturation 99%, temperature 36.4ºC	17.55	Outcome: the patient hears what is recommended Observing vital signs Results: BP 125/80 mmHg, pulse rate 70 x/minute, respiratory rate 21 x/minute,
13.15	Explain to the patient and family that the patient will be transferred to the inpatient room.	18.00	oxygen saturation 98%, temperature 36.6 ºC Explain to the patient and family that they will be transferred to the inpatient room.
13.25	Result: the patient has been transferred to the inpatient room and given further instructions to the room nurse.		Results: the patient has been transferred to the inpatient room and passed further instructions to the room nurse

Nursing evaluation is a stage for the nursing process, which is a systematic and planned comparison between the observed results and the goals or outcome criteria that will be made at the planning stage. [28]

Table 5: Nursing Evaluation of Patients 1 and 2

Nursing diagnoses	Patient 1	Patient 2
Circulation		
Instability of Blood Glucose Levels	S: The patient says the feeling of weakness is reduced O: The general condition looked moderately ill, and compos mentis consciousness BP 120/70 mmHg, pulse 80x/minute, respiratory rate 20x/minute, oxygen saturation 99%, temperature 36.4ºC, and GDS 256 mg/dl A: Instability of Blood Glucose Levels partially resolved P: Intervention was continued number 5,6,9,10,12 in the inpatient room	S: The patient says that the feeling of weakness and nausea has decreased O: The general condition looked moderately ill; consciousness was compos mentis, and no vomiting. BP 125/80 mmHg, pulse rate 70x/minute, respiratory rate 21 x/minute, oxygen saturation 98%, temperature 36.6 ºC, GDS 225 mg/dl A: Instability of Blood Glucose Levels partially resolved P: The intervention was continued in the inpatient room
Secondary Survey Ansietas	S: The patient reports feeling less anxious O: The general condition looked moderately ill, compos mentis consciousness, BP 120/70 mmHg, pulse 80 x/minute, respiratory rate 20 x/minute, 99% oxygen saturation, temperature 36.4ºC, and facial expressions looked relaxed. A: Anxiety partially resolved P: The intervention was continued in the inpatient room	S: Patients say anxiety is reduced O: The general condition looked moderately ill, compos mentis awareness, BP 125/80 mmHg, pulse rate 70 x/minute, respiratory rate 21 x/minute, oxygen saturation 98%, temperature 36.6 ºC, and facial expression looked relaxed A: Anxiety partially resolved P: The intervention was continued in the inpatient room

The author and the Emergency Room nurse conducted an Initial Assessment using the format of an emergency nursing care assessment by means of data collection methods through interviews, observation, and physical examination of the two patients in the Emergency Room of TK.II Moh.Ridwan Meuraksa Hospital, Jakarta.

The results of this patient identity data were obtained from patient 1 with the initials Mr. S, male sex with age 46 years, working as a TNI AD, Javanese ethnicity, married status, medical diagnosis, namely Diabetes Mellitus type II. Patient 1 data collection was collected on April 13, 2022, at 09.10 WIB. The second data was obtained by patient 2 with the initials Mr. J, male, 56 years old, working as a civil servant at the Headquarters and the Ministry of Defense, married, Javanese ethnicity, medical diagnosis of Diabetes Mellitus type II. This data was collected on April 19, 2022, at 14.23. The authors found a 10-year age difference between the two patients. Both patients were categorized in the late adulthood stage and the same sex, namely male. Patient 1 has no past medical history, while Patient 2 has had a history of hypertension, diabetes mellitus, and stroke since 2020. The author did not find any inhibiting factors in conducting interviews because patients 1 and 2 were very cooperative in answering the questions asked, making it easier for the author to identify the patient's identity. In patients 1 and 2, the same medical diagnosis was obtained, namely Diabetes Mellitus type II.

The Triage assessment is carried out by assessing the level of emergency, in case patient 1 is in the non-emergency Triage zone or priority 3, the green symbol. Priority 3 is the patient's condition does not require immediate help, is not life-threatening, and does not cause disability, while patient 2 is in non-emergency triage or priority 2 is a yellow symbol. Priority 2 is when the patient is life-threatening but does not require emergency treatment or there is still time for treatment. To determine triage and response or time for patient handling, it takes less than 5 minutes.

The author conducted a primary survey for airway assessment and found similarities in patients 1 and 2, namely a patent airway, no airway obstruction, vesicular breath sounds, no additional breath sounds such as wheezing, rhonchi, no other complaints, so the authors can draw conclusions on the airway of patients 1 and 2 clear. The author found that the breathing assessment data in patients 1 and 2 had similarities: symmetrical chest movements with normal breathing rhythms, regular

breathing patterns, no chest muscle retractions, and no shortness of breath. So the authors can clearly draw conclusions on breathing in patients 1 and 2.

The authors found that the Circulation assessment data in patients 1 and 2 had similarities: a palpable, strong pulse, no signs of bleeding, and cyanosis; Patient 1's pulse rate was 75 x/minute, while Patient 2's pulse rate was 107 x/minute. Both patients had health problems; namely, patient 1 had complaints of weakness, urinated about 10 times at night, and lost 5-6 kg in 10 days; patient 1 refused to give insulin therapy on the grounds that he was afraid of insulin dependence, so the patient was given oral medication.

Patient 2 experienced complaints of weakness due to vomiting one day before entering the hospital, spoke unclearly and stopped taking diabetes medication. So the authors can conclude that the circulation in patients 1 and 2 is unclear. The author found that the Disability assessments in patients 1 and 2 had in common. Namely, the patient's response was good, the level of consciousness was compos mentis, pupil reaction isochor, light reflex +/+, and no other complaints. So the authors can conclude Disability in patients 1 and 2.

The results of the Exposure assessment of patients 1 and 2 showed no deformities, contusions, or signs of abrasion, penetration, lacerations, edema, or additional complaints. The author can draw the conclusion that exposure is clear. The author found the primary survey assessment data in patients 1 and 2 and concluded that the primary survey was unclear. The supporting factors in assessing patients 1 and 2 were sufficient data through the results of interviews accompanied by the ward nurse in carrying out the assessment and physical examination of the patient.

The secondary survey is an assessment carried out by the health team for patients who are critical after the primary survey assessment is carried out to find out the cause of the emergency condition experienced by the patient. This assessment also includes a head-to-toe physical assessment, previous medical history, history of hospital admission, family history of disease, and supporting examinations.

In the secondary survey assessment, the authors obtained physical examination data in patients 1 and 2 with the result that in the head, there were no abnormalities such as lacerations, no lumps, and no distension of the jugular veins in the neck; in the chest area symmetrical results were obtained in both patients, patient 1 had a normal breathing rhythm with a frequency of 19 x/minute while patient 2 has a fast breathing rhythm with a frequency of 28 x/minute, there are no muscle retractions in both patients, there are no abnormalities in the abdomen of the two patients such as tenderness, in the pelvis there are no abnormalities such as fractures or deformities, in the back, there were no abnormalities and no problems on physical examination of the 12 cranial nerves in the neurological response of patients 1 and 2. The authors found data on the secondary survey assessment of patients 1 and 2 to conclude that the second survey was clear.

Diagnostic examinations in patients 1 and 2 were carried out by taking GDS, Routine Blood, Complete Urine, and Covid-19 Antigen Swabs by nurses in the Emergency Room. In the diagnostic examination, the authors obtained similarities, namely routine blood sampling and CBS, so the authors concluded that there was no gap between theory and cases.

This author concludes the diagnostic examination of patients 1 and 2, with the first stage measuring vital signs (TTV), the second stage carrying out an EKG supporting examination, the third stage carrying out laboratory tests for blood sugar levels, the fourth stage carrying swab samples for Covid-19 antigen. 19, the final action was inserting parenteral therapy with peripheral intravenous (infusion) with 0.9% NaCl solution; patient 1 was given oral therapy for diabetes medication, while patient 2 was given insulin therapy.

A nursing diagnosis is a statement describing a problem with the patient's health status, either actual or potential, and is determined based on the analysis and interpretation of data from the assessment results. It identifies and focuses on enforcing nursing problems in patients according to problem specifications [29]. The circulation nursing diagnosis in patients 1 and 2 is unstable blood glucose levels with the definition of variations in blood glucose levels up/down from the normal range [30].

Secondary survey diagnosis secondary survey assessment of patient 1 said he had decreased appetite and felt anxious and afraid because he could not work. Patient 2 said he felt anxious and afraid because he could not work. Supporting factors in establishing a nursing diagnosis are the data found to be sufficiently supportive in establishing the diagnosis as obtained through the results of interview observations conducted by the author.

The author arranges the outcome criteria based on the diagnoses that have been formulated, which must be specific, achievable, and accountable. This intervention has no time limit but remains focused on treatment which starts in 10 minutes, including observation, education, and collaborative actions that can be carried out independently, dependently, and interdependently according to the problems of the primary survey and secondary survey in patients 1 and 2. Action plan nursing can be determined by the author, who refers to references to clear and well-measured theoretical reviews. Interventions were carried out following the primary and secondary survey problems in patients 1 and 2. The author used references from the PPNI Indonesian Nursing Intervention Standards (SIKI) book to determine interventions in patients 1 and 2, with therapeutic nursing actions and collaborative actions in patient 1 in the treatment room, namely Metformin 1x500 mg/day orally, Glimepirid 1x4 mg/morning orally, while collaborative therapy in patient 2, namely Candesartan 1x8 mg orally, Novorapid 3x10 units/subcutaneous, Omeprazole 2x 40 mg/intravenous, Ondansetron 3x4mg/intravenous, Ceftriaxon 1x2 gr/intravenous, The author also conducts education about food consumed, namely the diet of diabetic patients with calories 25-30 mg calories/kg ideal body weight based on the results of a case study it was found that patient 1 was not willing to be given insulin therapy for reasons of fear of dependence on therapy so that patient 1 was given oral medication. In contrast, patient two was given insulin therapy; there were differences in the management of the two patients.

Implementation is a stage of nursing to apply a nursing action plan that has been prepared in the form of nursing actions that are used to assist patients in achieving the goals that have been set. [31]. Nursing implementation was carried out in patients 1 and 2 starting in about 10 minutes with a response time of less than five minutes. In the implementation of primary circulation, patients 1 and 2 were declared unclear with a nursing diagnosis of unstable blood glucose levels. The author performs independent nursing actions, namely measuring vital signs, teaching deep

breathing relaxation techniques, and educating diabetes patients about a diet with 25-30 calories per kg of ideal body weight. Carrying out collaborative actions, namely checking blood sugar in both patients, giving insulin Novorapid 3x10 units/subcutaneously in patient 2 and giving oral therapy with Metformin 500 mg and Glimepirid 4 mg in patients, co-authors with room nurses performing peripheral intravenous infusion (infusion) with fluids NaCl 0.9%. The author and the room nurse observed the patient's response to the independent and collaborative actions that had been carried out on both patients. Health services in carrying out the process of nursing care, writers and room nurses, and other health workers are required to adapt to the conditions of type II Diabetes Mellitus patients, then health workers can implement security procedures, namely by using personal protective equipment and implementing health protocols that must be carried out by patients and families around the IGD TK.II Moh.Ridwan Meuraksa Hospital.

The authors found differences in treatment management in the two patients in terms of administering diabetes drug therapy so that it can be concluded that the success rate for both patients with a nursing diagnosis of unstable blood glucose levels can be drawn. Evaluation of the success after the treatment of both patients was carried out while blood sugar was checked in patient 1 after administration of Metformin 500 mg and Glimepiride 4 mg. The blood sugar result was 256 mg/dl, while in patient 2, after administration of 10 units of insulin, the blood sugar result was 225 mg/dl. Then the circulation diagnostic assessment is partially resolved.

Evaluate the results of the secondary survey with a nursing diagnosis of Anxiety after independent nursing actions, namely deep breathing relaxation techniques both patients can do it independently to overcome the anxiety experienced by patient 1 showing more relaxed facial expressions marked by Blood Pressure 120/70 mmHg, frequency pulse 80 x/minute, respiratory rate 20 x/minute, oxygen saturation 99%, temperature 36,4ºC. In patient 2, relaxed facial expressions were indicated by blood pressure 125/80 mmHg, pulse rate 70 x/minute, respiratory rate 12 x/minute, oxygen saturation 98%, and temperature 36.6 ºC. So the assessment of the diagnosis of secondary anxiety is partially resolved.

The success rate obtained in patients 1 and 2 is because the patient and family are cooperative and can work together in every action taken. The author concludes at the evaluation stage that how important it is for the health team, in this case, nurses, to carry out emergency nursing care for type II diabetes mellitus patients with emergency conditions starting from the primary survey assessment to determine nursing diagnoses, develop interventions to carry out independent nursing actions and collaborative actions with the health team others by applying the principle of caring attitude in providing nursing care to diabetes patients with emergencies, evaluating and documenting the data obtained in the patient's medical record. The management results of patients 1 and 2 still required further treatment, so the two patients were treated in the internal medicine inpatient room.

Conclusion

The nursing assessment data obtained by the authors found differences between patients 1 and 2 between theory and cases. In patients 1 and 2, it was carried out in accordance with the flow of handling diabetes mellitus patients. In carrying out the assessment, the two patients were cooperative when interviewed with the writer and the nurse, making it easier for the writer to complete the patient's health status data. The stages of this nursing diagnosis are based on primary and secondary surveys. In the primary survey, there were two nursing diagnoses. Some of the diagnoses, in theory, are the same as the case. Patients 1 and 2 had one diagnosis in the circulation section, while the second survey obtained one nursing diagnosis in both patients, namely anxiety. On this occasion, the author remains focused on discussing the primary and secondary surveys in patients 1 and 2. The stages of nursing intervention with planning activities include problem priorities, goals, outcome criteria, and determining the actions given to patients 1 and 2. The authors did not experience obstacles in compiling and planning nursing actions at the intervention stage because they referred to Indonesian nursing intervention standards. The writer and room nurse can carry out the planned nursing actions at this stage. The nursing action plan has been determined based on the primary and secondary survey nursing problems. Implementation can be done well because there is cooperation between the patient, the writer, and the nurse in the room; every action taken is documented in the patient's nursing record. At this stage, the author evaluates the results by observing the patient's response. At this stage, the author knows the results of managing diabetes mellitus in the emergency room at TK.II Moh.Ridwan Meuraksa Hospital, Jakarta. The primary survey problem in circulation was partially resolved with the results of patients 1 and 2. The results of blood sugar levels decreased after the administration of diabetes therapy; the problem was partially resolved. The secondary survey in patients 1 and 2 were partially resolved, decreasing anxiety and fear. In this case, the authors conclude that the importance of a cooperative attitude, family motivation, and encouragement for the patient's healing process is a supporting factor for the success of nursing care. The management results of patients 1 and 2 still require further treatment, and the two patients were taken to the lavender inpatient room.

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