HOME CARE ACTIVITIES IN THE CASE OF FRACTURES POST OPERATION H+17 TRAFFIC ACCIDENTS

Rizaludin Akbar¹, Anita Faridhawati², Dede Roheti³, Kirani Wulandari⁴, Nurmi⁵, Nurul Intaniyyah⁶, Quini Azzahra⁷, Rismayanti⁸, Sherly Kirana⁹

¹-⁹ Faculty of Health Sciences, University of Muhammadiyah Cirebon, West Java, Indonesia
Corresponding Author E-mail rizaludin.akbar@umc.ac.id

Abstract: We have prepared the report on the results of the nursing study program's home visit activities correctly, Faculty of Health Sciences, University of Muhammadiyah Cirebon. Traffic accidents (KLL) are one of Indonesia's most significant causes of death. The large number of victims will have a significant economic and social impact (material losses) and various preventive efforts to improve traffic by involving various related parties, but the results are not as expected. Home Care services are expected to be able to apply a healthy lifestyle and pay attention to their welfare, primarily related to health.

Keywords: home, care, fracture, healthy, services

INTRODUCTION
Accidents caused by driver negligence or misuse can be significantly reduced if road users strictly adhere to traffic regulations. The fourth and first paragraphs underscore the importance of order and safety, particularly Articles 105 and 106, which state that 'everyone using the road is obligated to behave in an orderly manner.' Furthermore, as per the description in Article 310 of the Road Traffic and Transportation Law, a driver's negligence resulting in injuries or fatalities of others will be penalized by this article.

Strives to continue to increase awareness of the importance of driving safety while reducing the number of traffic accidents. According to the data released by the Indonesian National Police, most traffic accident cases are dominated by victims of a productive age. The causes of traffic accidents universally have two main factors: human error and technical problems such as vehicles not meeting traffic conditions, brake blows, broken tires, hot engine burns, no lights (spotlights and signs), and other technical problems. Meanwhile, human errors can include the condition of the driver who is drowsy, drunk (under the influence of alcohol or drugs), lack of concentration, emotional (stress/burden of the mind), often violates in traffic, and unqualified driving skills.

The most common fracture that occurs due to a traffic accident is a femur fracture. The fracture occurs when the external pressure is more significant than what the bone can
absorb, and trauma to the bone occurs, which results in damage or disconnection of bone continuity. This can cause changes in vital signs, which include blood pressure, pulse, breathing, and pain in the patient, and behavior will change if he feels changes in vital signs that impact daily activities.

One of the traumas that results in the highest disability and death is vertebral fractures. The resources required to treat or manage vertebral fractures are so large that effective management is needed to prevent and manage vertebral fractures. One of the critical steps in preventing vertebral trauma is data collection and data analysis to help identify problems and identify risk factors that may exist in the community. In this case, epidemiological research is essential, especially on vertebral trauma.

Fracture patients complain of musculoskeletal pain and are included in acute pain. Pain in fracture events is a type of nociceptive pain involving transduction, transmission, modulation, and perception processes. Tissue damage caused by trauma, such as muscle tears and broken bone continuity, will spur the release of chemical substances (inflammatory mediators) that cause inflammatory reactions that are passed on as signals to the brain.

Figure 1. X-ray Examination Results

Foundations of Home Care Activities
Home Care services are expected to be able to apply a healthy lifestyle and pay attention to their welfare, primarily related to health.

Purpose and Purpose of Home Care Activities
- Explaining the Definition of Fracture
- Explaining the causes of Fractures
- Explaining about supporting examinations for Diabetes Mellitus Abscesses
- Conducting an assessment on patients with post-KLL Fracture
- Able to enforce nursing diagnosis in patients with fractures
- Developing a nursing plan for patients with fractures
- Carrying out nursing procedures on patients with fractures
- Evaluate nursing actions on patients who have fractures

LITERATUR

Definition of Home Care
Home care is one of the health services carried out in the family's residence to improve and maintain family health. Home care prioritizes fulfilling patient satisfaction through providing quality health services without violating the code of ethics and professional service quality standards (Fahrepi et al., 2019). Patients who require home care generally have a variety of physical, socio-economic, and psychological problems. Some patients who are in a medically unstable condition may suffer from acute problems such as wound infections or worsening chronic conditions such as problems with the lungs. In such conditions, patients usually need treatment and equipment at home, professional assessment, education, and therapy changes. Some other patients may have a medically stable condition, but they need long-term treatment to prevent the condition from worsening and avoid hospital treatment (Rahmi & Ramadhanti, 2017).

In some developed countries, home care is not a new concept. William Rathon has developed this concept since 1859 in Liverpool which is called home care in the form of home visits by nursing staff to treat patients who are sick and are not willing to be taken to the hospital. Home care is also carried out by providing care to patients with low economic status, poor sanitation conditions, poor personal and environmental hygiene, and poor nutrition, so they are at risk of various types of infections commonly found in the community. Therefore, knowledge of various fields, such as family dynamics, cultural activities, spiritual values, and communication principles, is needed to provide home care services (Rahmi & Ramadhanti, 2017).

Benefits of Home Care
Benefits of Home Care for Clients and Families
- Increasing family knowledge and participation in health programs
- Improve the degree of family health.
- Improving family well-being

Benefits of Home Care for Nurses
As one of the evaluations for implementing the Homecare Nursing Clinic Practice course and achieving learning process targets for Nursing students.

Benefits of Home Care for Hospitals
This is input (information) for the work area of the Port Hospital so that health problems that exist in the Panjunan work area can be known and weakened and help increase community participation in health programs.

Development of Health Services at Home
At the beginning of its journey, Home Care is actually a very simple form of service: nurse visits elderly or infirm patients who are unable to walk to the hospital, who
do not have the cost to pay doctors at the hospital, or who do not have access to health services because of their social strata. Its implementation is also an initiative of religious leaders who care about the outbreak of health problems. Nurses who do it are known as visiting nurses.

When clients and families decide to use the home care system, they expect something they don't get from nursing services in the hospital. However, there is also a new fact: many people are sick and need treatment at home. Unfortunately, not all those who are sick or their families can access homecare services due to economic factors. In this helplessness, many patients finally resigned themselves to their illness at home, getting weaker and weaker every day and even ending in death.

It is common knowledge that many developed countries prefer to use Home Care as a priority in maintaining fitness or health status to stay in tip-top shape. Especially in developed countries such as the United States, the results of research presented by Bournet (in the Research Journal) about the development of "Home Care" or patient care in their own homes quantitatively show an increase from year to year.

In its development, home care is not limited to providing nursing care, which focuses on and is oriented towards the client's health alone. However, with Home Care, we can modify it by instilling the concept of brotherhood between clients, effective and efficient education efforts, and equitable distribution of Home Care quality in all regions.

**Implementation of Home Care Activities**

Several types of institutions can provide home care services, including:

- **Government institutions.** In Indonesia, home care services have been provided for a long time in the form of care for high-risk cases/families (both mothers, infants, toddlers, and the elderly) by Puskesmas nursing staff. The clients served by the Puskesmas are usually the lower middle class. In America, it is carried out by visiting nurses.

- **Social institutions:** These provide home care services voluntarily and without charging a fee. They are usually carried out by NGOs or religious organizations with donors as funders, such as the Salvation Center, which conducts home visits to families in need as a form of devotion to God.

- **Private institutions.** In the form of independent practice, both individuals and groups that provide home care services receive service rewards either directly from clients or payments through third parties (insurance)

- **Hospital-based Home Care.** It is a follow-up treatment for clients who have been treated in the hospital because they still need help with nursing services, so they are continued at home

**Types of Home Care Nursing Services**

In Indonesia, there are seven types of homecare services, including (Eddy Wiria, 2023):

- **Non-Medical Elderly Nurses (Caregivers).** Non-medical elderly caregivers or caregivers will provide services to accompany parents at home. Elderly caregivers will support their loved ones in their daily activities, such as helping the elderly walk to the bedroom and bathroom or change clothes. Elderly caregivers will help to take care of the elderly while they are working. With the increasing complexity of the elderly's condition, nurses who have also been trained can be used. The goal is to overcome several complex problems that often occur in the elderly due to aging, such as those who experience geriatric syndrome.

- **Medical Nurse.** Furthermore, some medical nurses have a practice license, practice permit, or registration certificate. However, they can be called home to provide medical care, such as wound care, catheter installation, NGT installation, injections, and infusions.
In addition, medical nurses can also help supervise the administration of medications and monitor their side effects, so they can help treat patients with chronic diseases at home.

Doctor to Home. In addition to medical nurses, homecare services also provide home doctor visits. This home doctor's service can help you get a medical examination, such as a physical examination, anamnesis, or sampling for laboratory examination. This service aims to allow patients to focus on resting at home to speed up recovery.

Palliative care. Homecare also provides palliative care services. This treatment is intended for those who have serious diseases such as cancer, heart failure, or stroke, where the patient can no longer be cured with medical help. This assistance is critical because palliative care can last for days, weeks, months, and even years. Patients and family members who care for them can experience physical and mental fatigue, so help from outside parties is highly recommended. Palliative care here helps improve patient's quality of life with a psychological and spiritual approach. The purpose of using palliative care at home is for patients to get care that makes them comfortable, including to prevent depression that can worsen the patient's condition. Palliative care also supervises and helps deal with various complaints, such as pain, restlessness, and chronic wounds.

Postoperative Care. The next type of homecare service is postoperative care. This service can be used if a family member has recently had surgery. Post-operative care at home will help treat scars from surgery. For example, if you have recently had a cesarean section or after knee and hip replacement surgery, a nurse will come to your home to examine the incision. The nurse may also perform a bandage change and ensure there are no complications of infection until the next time of control at the hospital.

Maternity Care. Then, there is maternity care, which will be helpful for pregnant women post-delivery. New mothers or mothers-to-be need assistance and monitoring so that they can live their pregnancy safely and smoothly. This is where home care nurses are needed. In addition to supervision, nurses will provide services to detect complications, administer intravenous therapy, and administer medications. Not only that, nurses will also provide education for mothers about baby care.

Rehabilitation Therapy. Rehabilitation therapy services will help you recover after experiencing decreased mobility due to surgery or stroke. Rehabilitation therapy usually includes physiotherapy, occupational therapy, swallowing therapy, and speech therapy. Home rehabilitation therapy makes it very easy for patients to practice more regularly in real situations at home. Also, it makes it easier for family members who, for example, find it challenging to manage delivery time. In addition to being beneficial for the elderly and post-stroke patients, this rehabilitation therapy can also be used for children with autism spectrum disorders. Because with occupational therapy, children with autism can practice improving motor skills, communication, and self-care.

Home care health service nurses focus on three types: medical nurses, non-medical nurses, and midwives (Ivan Sebastian, 2021). The following is an explanation of each category of home care services:

Medical Nurse. The main requirements that medical nurses must possess are D3-S1 nursing or health education, work experience, and an active Registration Certificate (STR). Medical nurses must have experience working in health services such as hospitals and have served in the Emergency Room, ICU, or Inpatient setting; nurses are sure to be able to use various medical equipment needed by patients. That experience will be brought to the homes of patients who need medical procedures such as the installation of infusions, NGTs or tubes for feeding, catheters or tubes for urination, and other equipment. The cost of calling a medical nurse to a home depends on the health care provider company and the
nurse's experience. Usually, the cost of nursing sick people at homes with medical equipment installed starts from 5.5 million/month.

Non-Medical Nurse. Non-medical nurses or caregivers are health workers who have undergone special education and have experience working professionally in health services such as health centers, clinics, or hospitals. The scope of non-medical nurses is minimal, and they can only assist and care for patients. Generally, clients who use this type of nurse services are the elderly or the elderly, patients recovering from severe or post-surgery illness without using any medical equipment at all. The cost of using the services of a nurse to assist or care for patients at home depends on the home care health service provider company and its location or city of operation. The fees offered for caregivers usually start from IDR 2 million/month.

Mother and Child Nurse. Maternal and child nurses are health workers with a minimum of D3/S1 Midwifery education and experience working in health facilities such as health centers, clinics, or hospitals. In addition, midwives or midwives are required to have a letter or license to work at a home care company. The scope of duties and responsibilities of midwives only includes nurturing or mentoring mothers and children, both for pregnant women and postpartum. The rate or cost of using maternal and child nursing services from midwives depends on the home care health service provider. The price offered can start from IDR 3.5 million/month.

METHOD

Home visit Home Care activities to post KLL (Traffic Accident) patients with fractures.

![Image 1](image1.jpg)

![Image 2](image2.jpg)

Figure 2. Patient Survey (Thursday, January 04, 2024)

Wound care, ROM (Range Of Motion), education about diet and mobilization in post-op fracture patients.

**Activity Participants:**
- Provision of wound care and ROM
- Patient
- Patient's family
- Nursing students

**Time and Place of Activity**
According to the time contract with the place that both parties have agreed
- Time: 1 – 2 hours per visit
- Place: Patient's home

**RESULTS AND DISCUSSION**
**Implementation Matriculation**
**First Day Visit**
- **Informed Consent**
- Conduct a review, including the identity of the patient and family as the person in charge of patient care
- Asking about patient complaints
- Assessment of the patient's health history, head-to-toe, Bio-Psycho-Socio-Spiritual assessment, and patient ADL ability.
- Conduct data analysis, determine diagnosis, and prepare activity plans to be given

The purpose of this first visit is to foster a relationship of mutual trust, review the problems felt by the patient, and make a nursing plan that will be given to the patient. This plan aims to help the patient in the healing process.

The first meeting is to find the right patient for home care, obtain informed consent, and ask about all complaints felt by the patient. When the patient is found to have the expected characteristics, a comprehensive assessment is conducted, the results of the collected data are analyzed, the intervention is prepared, and the intervention stage is prepared.

**Second curry visit**
The implementation of the first planning stage is by what has been prepared, including:
- Informed Consent
- Ask about your complaints
- TTV Inspection
- Assisting patients in performing ROM movements
- Diet Education
- Aromatherapy

Evaluation of all actions that have been taken by asking how the patient responds
Contract time for the next meeting.
It helps patients heal and prevent infections. In addition, it encourages patients to often do exercises (ROM) independently with the assistance of family.
This second meeting was to carry out the planning stage of the prepared nursing actions. After that, all the actions that have been taken should be evaluated.

Third day visit
1. The implementation of the second planning stage includes:
   - Informed Consent
   - Ask about your complaints
- TTV Inspection
- Perform wound care and bandage changes
- Education
  
  About Mobilization
  2. Evaluation of all actions that have been taken, by asking how the patient responds.

Final termination
It assists in patients' healing and prevents infection. In addition, it helps in their independence by teaching activities that can be done according to their abilities. At this third meeting, the nursing action planner that has been prepared evaluates all the actions that have been taken. In addition, the third meeting stage examines patients' and families' ability to take action based on independent planning.

3rd Home Visit (Monday, January 15, 2024)

Service And Financing System

Service Process
The process in the Home Care service that we provide, as follows, patients must carry out a contract system with the wound care service, either through On Call or directly with the wound care service.

Equipment
The following are some of the equipment needed when performing postoperative wound care in fracture patients with pen installation: NaCl Solution, Sterile Gauze, Glove, Hipavik, and Sofra Tulle. The equipment needed includes Scissors, an Instrument Tub, a Stethoscope, a Spignomanometer, a Thermometer, a Small Kom, a Bent, Sirugis tweezers, Anatomical Tweezers, Perlak.
Study Home Care Nursing

Origin of Patient Referrals.
( ) Doctor's Practice ( ) Health Center ( Other (√) Hospitals ( ) Come Alone

Biodata.
- Patient Name: Mr. G
- Age: 30 years old
- Work: Nurse
- Education: S1 Nursing Profession
- Address: Nyapa Block RT 003/001 Kel.
- Login Date: 21 December 2023
- Exit Date: 26 December 2023
- Visit: Patient's home
- Type: Fracture

Vital Signs.
BP:
- Lie down
- Sit
- Stand
HR: 112 x/min
RR: 24 x/min
T: 36.1°C
TD: 110/80 mmHg

Physical Examination.
Mental Status.
- Level of Consciousness:
  (√) Compos mentis.  ( ) Apathy.  ( ) Somnolent.  ( ) Sofa.  ( ) Coma.
- Orientation:
  ( ) Time.  ( ) Place.  (√) Persons.
- Disorientation: None
- Confused: None
- Depression: None
- Memory:
  (√) Past Memory: The patient's memory in the past is very good
  (√) Recent Memory: The patient's memory in the short term is very good
  - Ancietas: None

Integument
- Color: Kuning Langsat
- Warm / Dry: Warm
- Diaphoresis: None
- Jaundice: None
- Itching: None
- Bruises: None
- Wounds/incisions: There are incisions on the right shoulder, left arm, and right leg knee.
- Lesions on the oral mucosa: None
- KRT: No KRT
- General appearance: (√) Clean. ( ) Dirty.
Musculoskeletal:
- Weaknesses/Paralyses: There is muscle weakness. Leg and hand muscle strength with a score of 3.
- Using the Aids: Bedrest
- Balance: 
  ( ) Strong  (√) Weak
- ROM Drop: There is a limitation of movement in the broken leg and hand
Neurology:
- Dizzy: None
- Headache: None
- Muscle strength of the extremities: (√) Right. (√) Left.
- Pupil Reaction: Usual
- Reflex: 
  (√) Physiological
  (√) Pathological: On the right leg it is not done because there is a fracture
Cardiopulmonary:
- Arritmia: None
- Chest Pain: None
  ( -) Rest.  ( -) Activities.
- Jugular vein distension: None
- Crepitation: None
- Rales/ Ronchi: None
- Wheezing: None
- Cough: None
- Sputum: None
- O2: 98 %
- Oedema: None
Gastro-Intestinal:
- Appetite: Usual
- Liquid Intake: 9 cups/day (1800 cc)
- Nutritional Status: (√) Good.  ( ) Bad.  BMI:
- Nausea/vomiting: None
- Pain/Bleeding: There is pain with a scale of 8 in the wound
- Flatus: None
- Abdominal Distension: None
- Ostomy: ( -) Stoma
- Skin Condition: Clean, Turgor skin quickly returns
- Diarrhea: None
- Constipation: Solid 1 x a day
- Intestinal Noise: peristaltic 15x per minute
Enterhal Nutrition: 
  ( ) NGT.  (√) Oral.
Type of Food: Rice and side dishes
Number: 300 grams
Frequency: 3 times a day
Genito Urinaria.
- Dysuria / Hematuria: None
- Frequency: 1,200 cc/day
- Urine Retention: None
- Urinary Incontinence: None
- Urine Characteristics: Liquid and deep color
- Using catheter: None ( )
  - Color: None
  - Bau: None ( )
  - Number: None
- Vaginal / penis discharge: None

ENT.
- Dyspagia: None
- Hearing Loss: None
- Drainage: None
- Redness: None
- Others: None

Pain.
OPQRSTUV Pain Assessment:
- O: Pain arises at night
- P: Patients feel hungry when moving
- Q: Stabbing pain
- R: Upper and lower aesthetics
- S: Scale 8
- T: Every 5 minutes
- U: Pain arises at night and interferes with sleep
- V: Expected pain scale of 5

Health status at home.
- Only in bed: Yes
- Wheelchair assistance: Yes
- Cardiovascular instability: None
- Decreased vision: None
- Mental status: No mental status disorder
- Decreased muscle strength: Normal left leg lower extremity
- Wound drainage: None
- Dypsnea: None
- Severe Pain: There is pain on a scale of 8
- Mobility impairment: There is a mobility disorder
- Others: None

Collaborative Management and Nursing Care for Each Visit:
- Laboratory Examination: X-rays, ECG, C-arm, Hematology
- Wound Care: It is done every two days.
- Administration of Medical Therapy: Oscal tab 1x1, Nutriflam tab 2x1, Analisik tab 1x1, Celecoxib 200 mg tab 1x1, Omeprazole tab 2x1, Eperizone tab 2x1, Wound and bone vitamins tab 1x1.
- Pain management: Analgetic (Paracetamol tabs every 4 hours first, Ibuprofen tabs every 4 hours second).
- Dietary Instructions: A diet high in calories and high in protein.
- Providing a Sense of Security & Comfort: Physiotherapy is done one week two times.
- Terminal Disease Monitoring: None
- Contract For Next Visit: The second-day visit on 09 January 2024 and the next week before Aff Heating

CONCLUSION
Thus, this is the report on the results of the home visit activities of the Nursing Study Program, Faculty of Health Sciences, University of Muhammadiyah Cirebon, which we have prepared correctly. Sorry if there is a mistake in the words. Hopefully, this activity can establish a good relationship and bring pleasure and wisdom to all of us. Aamiin Yarabbal’Alamiin.

BIBLIOGRAPHY


