



FAMILY NURSING CARE IN CASE OF GOUT ARTHRITIS WITH NURSING DIAGNOSIS OF ACUTE PAIN IN SIDOGEMBUL VILLAGE, SUKODADI DISTRICT, LAMONGAN REGENCY

Research Report

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ABSTRACT

Introduction: Since the end of 2019, the COVID-19 virus has turned into a global health problem and has changed various aspects of life, including education. The government felt compelled to close down the school and encouraged students to carry out online learning. During the online learning process, there are numerous arising obstacles. Thus, the government considered changing it to offline learning in 2021. In its implementation, however, there were many factors regarding learning readiness that must be taken into account, such as physical, psychological, and material readiness. This study aims to analyze the factors influencing offline learning readiness during the COVID-19 pandemic. **Methods:** This study is quantitative research carried out by employing a cross-sectional approach. There were 49 respondents obtained through a total sampling technique. A questionnaire was utilized as the research instrument and the Chi-Square test was used as the bivariate data analysis. **Results:** The result revealed that most respondents (73.5%) were females and the mean value of respondents' age was 20.88 years. Furthermore, the respondents had high offline learning readiness (67.3%) and physical readiness, psychological readiness, and material readiness classified under the "ready" category with (81.6%), (57.1%), and (57.1%), respectively. The results of the Chi-Square test showed that physical, psychological, and material readiness influenced offline learning readiness. **Conclusions:** The present study also concluded that physical readiness was the most dominant factor which affects offline learning readiness.

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INTRODUCTION

Pain is a personal and subjective experience, and no two individuals experience deep pain identical pattern. Pain can be defined in many ways. Pain is usually associated with some type of tissue damage, which is a warning sign, but the experience of pain goes beyond that. The International Association for the Study of Pain (IASP) provides an accepted medical definition of pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described as similar damage" (Black, Joyee M & Hawks, 2014). The etiology of Gout Arthritis is genetic factors, excess uric acid production, decreased excretion of uric acid through the kidneys, age, gender, diet, and obesity. The prevalence of Gout in East Java is 17%. In Lamongan

Regency, Gout Arthritis was included in the 10 main diseases in 2016.

Acute pain is a sensory or emotional experience related to actual or functional tissue damage, with sudden or slow onset and mild to severe intensity that lasts less than 3 months, while chronic pain lasts more than 3 months (SDKI, 2017). Based on data from the World Health Organization, the prevalence of Gout Arthritis in the world is 34.2%. Gout Arthritis often occurs in developed countries like America. The prevalence of Gout Arthritis in America is 26.3% of the total population. The increasing incidence of Gout Arthritis does not only occur in developed countries. However, an increase has also occurred in developing countries, one of which is in Indonesia (WHO, 2017). The prevalence of joint disease in Indonesia was higher for women (8.46%) than

men (6.13%). Based on age, the highest prevalence was at age > 75 years (18.95%) (Kementrian Kesehatan RI, 2018). The prevalence of Gout in East Java is 17%. In Lamongan Regency, Gout Arthritis was included in the 10 main diseases in 2016. The community only checks for uric acid if they already feel symptoms of joint pain so that the data for diagnosing hyperuricemia cannot yet be obtained reported specifically (Pangestu et al, 2019).

Gout Arthritis is an inflammation of the joints as a manifestation of the accumulation of deposits of monosodium urate crystals, which collect in the joints as a result of high levels of uric acid in the blood (hyperuricemia) (Noor Zairin, 2016). Factors that cause people to develop gout include genetics or family history, intake of excessive purine compounds, excessive alcohol consumption, obesity (obesity), hypertension, impaired kidney function and certain drugs (especially diuretics). Uric acid levels can be known through the results of blood tests in the urine. The reference value for normal uric acid levels in men is 3.6-8.2 mg/dL, while in women it is 2.3 -6.1 mg/dL (Atik, M., 2016). Pain caused by pain often awakens the client abruptly from sleep or may have developed gradually over the hours prior to presentation, with a maximum pain intensity of up to 24 hours (Cho, Kim, Chung, & Jee, 2015).

Severe pain in the joints that is felt repeatedly is very disturbing to the sufferer. If not treated immediately, this disease can also cause bone deformities and complications of renal disorders, heart disease, diabetes mellitus, stroke and osteoporosis (Nasir, 2019). Decline in musculoskeletal abilities because joint pain can have an impact on decreased activity including eating, drinking, walking, bathing, defecating and urinating (Chintyawati, 2014). The role of the family on the client have gout arthritis, can done by giving treatment, and motivation to clients to drink mineral water, low purine diet, eat fruits, vitamins, and consuming complex and simple carbohydrates (Lucia R, Nurul H, Alfiasari, et al., 2019). Meanwhile, the role of the nurse in treating Gout Arthritis sufferers is by providing Health Education to sufferers such as how to deal with recurring gout, nurses providing information or knowledge to sufferers about the causes and treatment of decreasing the Gout Arthritis pain scale (Mulfianda & Nidia, 2019).

Based on the description above, the authors are interested in conducting a case study "Family Nursing Care for Gout Arthritis Clients with Nursing Diagnoses of Acute Pain. The a of this case study is to provide Family

Nursing Care for Gout Arthritis Cases with a Nursing Diagnosis of Acute Pain in Sidogembul Village, Sukodadi District, Lamongan Regency.

MATERIALS AND METHODS

The research design used in this research is case study research, the inclusion criteria were families whose family members had rheumatoid arthritis. The study participants were conducted on five clients who experienced the same nursing problem, namely acute pain, carried out during three home visits. Data collection techniques obtained through interviews, observation, physical examination, and documentation. The data validity test was carried out to prove the quality of the data obtained in the case study. In testing the validity of the data, it is carried out in two ways, namely Triangulation and Member Check (Sugiyono, 2017). The author uses triangulation of three data sources, namely the client, the client's family and health workers. Data analysis was carried out by collecting data, reducing data, presenting data, and drawing conclusions.

RESULTS

Family is a group of people connected by ties of marriage, adoption, birth, aims to create and maintaining a common culture, promoting the physical, mental, emotional and social development of each member. Family is an association of two or more individuals bound by blood, marriage or adoption and each family member always interacts with one another (Nurfadillah, 2018). Clients with gout arthritis will experience pain where individuals need to know strategies to relieve pain. Acute pain is a sensory or emotional experience related to actual or functional tissue damage, with sudden or slow onset and mild to severe intensity that lasts less than 3 months (SDKI, 2017).

Assessment

In a case review with 5 respondents, it was found that family 1, namely Mr. S, had health problems experienced by Mr. S, namely pain or rheumatic pain. Mr. S often says pain, especially in both ankles, pain scale 6, pain feels intermittent, pain feels like needle pricks, pain increases if you do very long activities and decreases when you just rest, Mr. S was never afraid of his illness and Mr. S was never treated. In family 2, Mrs. P has a health problem that is experienced by Mrs. P, namely gout. Mrs. P often says pain in both knees, pain scale is 7, pain feels intermittent, pain is like being pricked by needles, pain increases with activities and decreases with rest. It is difficult for Mrs.P to stand up from a sitting position, Mrs. P also often wakes up from her sleep

because she feels pain. In family 3, Mrs.S is found Ny.S experienced a health problem, namely uric acid. Mrs. S often says pain in both knees, especially the right leg, pain scale 8, pain feels intermittent, pain like stabbing (throbbing), pain increases when you move, activity and decrease when you rest, activity and movement performed resulting in pain as walking, and bending the knee. In family 4, Mrs. T recently said pain in both ankles, sometimes sudden pain in the fingers and toes, pain scale 5, pain like needle sticks, pain felt intermittent, pain occurs usually at night day and the morning after waking up. Mrs. T is one of the family members who often complains of pain and if the pain arises Mrs. T just smears it with oil. In a family of 5, Mrs. M has health problems experienced by Mrs. M, namely rheumatic pain or pain that is commonly felt. Mrs. M often feels pain in the ankles and knees of both legs, pain scale is 7, the pain feels intermittent, the pain is like being pricked by a needle, the pain increases if you do activities or walk long distances and it decreases when you rest. When Mrs. M walks, moves and has activities the pain arises, so Mrs. M feels uncomfortable because of the pain and makes Mrs. M often wake up during her sleep.

In the case review, 5 respondents had complaints of pain. Pain caused by pain often awakens the client abruptly from sleep or may have developed gradually over the hours prior to presentation, with a maximum pain intensity of up to 24 hours (Choi, H.K., Mount, D. B., Reginato, A., 2005). Severe pain in the joints that is felt repeatedly is very disturbing to the sufferer. There is a concordance and gap between the theoretical review and the case review in the assessment. In the anamnesis usually found complaints of severe pain in the joint area of the big toe and knee. The main complaint is pain through the PQRST, Palliative or Provocative (P) method, namely an assessment to determine the factors or events that trigger complaints of pain. Quality and Quantity (Q), namely the assessment of the nature of complaints such as what pain is felt or described by the client. Region or location (R), namely an assessment to determine the area or location of complaints of pain, whether the pain spreads and whether the pain spreads to other areas. Safety Scale or severity level (S), which is an assessment of how far the pain is felt. Time (T) is how long the pain lasts, according to Nuarif & Kusuma Hardhi (2015). In a case review of 5 families, according to the PQRST method. Family 1's main complaints are pain in both ankles, family 2 and 3 pain in both knees, family 4 pain in the middle finger and big toe, family 5 pain in the ankles and

knees of both feet. From 5 families, the same data was obtained, namely if they were active, the pain increased and the pain decreased if they were made to rest. There are gaps and suitability of 5 families with a literature review. Conformity from family 1,2,3,5 namely pain in the joint area of the big toe and knee. The discrepancy between family 4 and the literature review is that family 4 feels pain in the fingers, while in the literature review, pain in gout arthritis is in the big toe and knee joints. In clients who experience gout attacks, the symptoms are often seen in the joints most commonly affected, namely the first metatarsophalangeal joint (Neogi T, Gout. Ann Intern Med. 2016).

Diagnosis

According to the results of the study above, it can be concluded that the five families can be made a nursing diagnosis, namely acute pain related to the inability of the family to care for sick family members. This acute pain nursing diagnosis can be analyzed through the WOC (Web of Cautions) that someone who has gout arthritis has manifestations of pain resulting in acute pain. Nursing diagnoses according to Salvi Gusti, (2013) there is one of the main nursing diagnoses that appear in Gout Arthritis Patients, namely Acute Pain related to the inability of families to care for sick family members. So that there is conformity in the nursing diagnosis of case reviews and literature reviews.

DISCUSSION

Nursing Intervention

In carrying out nursing interventions, the authors carried out strategies to relieve pain, namely pain management and relaxation therapy (SIKI, 2017) (SLKI, 2017). The interventions that will be given are 1) Identify the location, characteristics, duration, frequency, quality, pain intensity, 2) Identify the disease and pain that appears, 3) Monitor blood pressure, 4) Monitor uric acid levels in the blood, 5) Give non-pharmacological with warm compresses on the painful part to reduce pain, 6) Instruct the client to rest if pain appears, 7) Explain to the family to maintain a conducive home environment., 8) Provide a comfortable position, 9) Provide health education regarding the causes pain, 10) Explain pain relief strategies, 11) Suggest using analgesics appropriately, 12) Instruct the family to always remind clients to take medication regularly, 13) Teach non-pharmacological techniques by doing relaxation and distraction techniques to reduce pain, 14) Explain how to care for members sick

family, 15) Give motivation to the family to remind the client not to eat foods that are prohibited, 16) Suggest the family make a diet for gout, 17) Instruct the family to take advantage of health service facilities if the pain they feel does not heal quickly, 18) Give positive reinforcement for the right actions taken by the family.

Then additional nursing interventions to reduce pain or strategies to relieve pain, namely warm cinnamon compresses and white ginger compresses to reduce the scale of pain that has been carried out by Nurul Hafiza, (2019) in the Sungai Durian Health Center Area, Kubu Raya Regency starting on December 18, 2018 until 30 April 2019 with 32 Respondents. The white ginger plant contains substances that are warm and when combined with warm compress therapy can make blood flow smooth, so that it can relieve pain and the body's muscles can relax. Smooth blood flow can reduce inflammation around the joints, especially in the joints of the toes and fingers. So therefore, Cinnamon warm compresses are effective for reducing the gout arthritis pain scale from mild to severe pain. The results of the research on the effectiveness of giving warm cinnamon compresses can be concluded that warm cinnamon compresses are effective to do in reducing uric acid levels in gout arthritis. While the results of the research on the effectiveness of giving white ginger warm compresses, it can be concluded that white ginger warm compresses are effective in reducing uric acid levels in gout arthritis.

The second additional intervention that has been researched by Karendung G, (2015) is reducing pain by consuming soursop leaves. This research was conducted in the working area of the Pineleng Health Center in February - March 2015 with 34 samples. The results of this study are in accordance with the theory put forward by Zerlina (2013) where consuming soursop leaf decoction can reduce pain in gout arthritis sufferers without any side effects because it does not contain chemicals with properties and benefits that have been recognized by researchers.

The third additional intervention was carried out by Gad Datak to reduce pain using the Benson relaxation technique in 2008 and was carried out in all effective Prostate TUR patients at a hospital in Jakarta. Benson's relaxation is one of the non-pharmacological interventions used to reduce postoperative pain. Benson relaxation is the development of a relaxation response method involving the patient's belief factor, which can create an internal environment so that it can create an internal environment so that it can help patients

achieve a higher state of health and well-being (Benson, H., & Proctor, 2000). The fourth additional intervention, namely the Relaxation Method using Lavender Aromatherapy to reduce Pain in Elderly with Gout which has been carried out research by Sulastris & Siti Sarifah (2017) at the Wredha Darma Bakti Surakarta Home. The test results of the effect of aromatherapy therapy on reducing pain on the first day and the third day using the Wilcoxon test in the elderly with increased uric acid obtained p value: 0.008 which means there is an effect.

The fifth additional intervention is using rose aromatherapy for pain intensity which was conducted by research by Minarti Dewi (2019). In research by Cenki (2017), namely the effect of aromatherapy on pain, comfort and satisfaction during child birth states that aromatherapy is efficient for reducing the perception of pain and increasing levels of comfort and satisfaction. Obtained from interview results after being given aromatherapy by inhalation using steam to arthritic patients said that the pain felt began to decrease, where the effect of rose essential oil used in aromatherapy contained the active ingredient linalool. The content of linalool which creates a feeling of relaxation and the content of linalool can also increase circulation and deliver electrochemical messages to the central nervous system (Indah, 2013).which transmits pain. Rose aromatherapy is beneficial for improve quality sleep, improve mood, speed up the healing process of disease and reduce pain (Purwanto, 2013).

Implementation

Implementation of nursing care for clients with gout arthritis is carried out with 17 items (SIKI, 2017). Implementation for the five families based on the plan that has been set. After done implementation of three home visits, the result was that 1 out of 5 families could carry out pain relief strategies in 3 visits, namely family 4, but families 1,2,3,5 said they still felt pain after 3 visits. The first implementation is to relieve pain with some strategies for pain relief. Implementation of nursing is a record of the actions given to the client. This record includes nursing actions given both independently and collaboratively, as well as fulfilling the outcome criteria for the actions given to clients. The author found no gaps between the literature review and the case review. In case reviews when nursing actions are carried out, implementation is carried out in accordance with the interventions made earlier. Implementation in diagnosis acute pain associated with family inability to care family members who are sick

are carried out according to 3 evaluation home visits. Evaluation is the last stage of the nursing process. This stage is carried out by internal nurses give an assessment and consideration of the goals and expected results as well as the implementation given to the client has been successful or not (Deborah, S., 2020). After doing 3 times visits, the implementation of the problem has not been resolved in families 1, 2, 3 and 5 because the client still feels a little pain. Family 4 got the results of the intervention being stopped because the pain had been resolved during 3 visits. From nursing care for 5 families, it can be concluded that pain is reduced after nonpharmacological techniques such as warm compresses and relaxation techniques. Treatment of gout sufferers is focused on how to control pain, reduce joint damage, and improve or maintain function and quality of life. Warm compresses it was more effective for reducing pain in gout sufferers (Hoesny, Alim, & Hartina, 2018).

CONCLUSIONS

After taking care actions After taking nursing care actions during 3 home visits to the five families with Gout Arthritis cases in the Sidogembul Village, Sukodadi District, Lamongan Regency in 2021. So the author gets real experience regarding providing family nursing care to clients with gout arthritis . The author can carry out the nursing process directly starting from assessment, formulation of diagnoses, interventions, implementation and evaluation as well as documenting. It is hoped that the case study can be useful for future authors in conducting case studies on family nursing care with gout arthritis, clients and families are able to overcome health problems suffered by utilizing appropriate health service sources, maintaining environment and can routinely take medication regularly, the family is able to care for sick family members, especially pain control.

For educational institutions to add references regarding family nursing care with gout arthritis, and for health professionals it is hoped that this can be used as input and information for the Sukodadi District Health Center regarding Gout Arthritis sufferers with a medical diagnosis of Acute Pain in Sidogembul Village, Sukodadi District, Lamongan Regency in an effort to improve quality of health services.

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