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Passive Mobilization Analysis To Prevent Decubitus Grade I Ulcuss In Cerebro Vascular Accident Patients

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ABSTRACT
Decubitus ulcers are one of the complications that occur in patients with CVA infarction, and have hemiplegi, paraplegi and parese. One way to prevent the occurrence of ulcers is by passive mobilization. The purpose of this study to determine whether passive mobilization can prevent the occurrence of decubitus ulcers in patients with paralysis (CVA).
Type of research used in this research is pre experiment. The sample in this study amounted to 16 respondents. Purposive Sampling Sampling Technique. Independent variable is passive mobilization, dependent variable of decubitus ulcers I. The research instrument uses observation sheet of decubitus ulcer wound with Mc Nemar statistic test.
There is a sign of ulcer wound and there is no ulcer sign as much as 8 people (50%). Most respondents after passive mobilization there was no signs of ulcers dekubitus that is as many as 14 people (87%).
The result of statistical test got significance value is p = 0,031 means reject Ho conclusion there is influence of passive mobilization To Prevent Occurrence of Decubitus Ulcus I Degrees On Patient Paralysis (CVA).
Proven passive mobilization effect To prevent the occurrence of Decubitus I Decubitus ulcus. Passive mobilization will reduce the pressure on the skin, thus preventing the occurrence of ulcers dekubitus, by doing the movement of the legs, hand with bend and tilt the right and left.

Keywords: Passive Mobilization, Decubitus Ulcer, Paralysis

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BACKGROUND

Decubitus is a wound that arises due to pressure, especially on the prominent parts of the bones due to prolonged bed rest (Siregar, 2010). One of the risk factors for decubitus is stroke. In CVA or stroke there is a decrease in function and one of the muscle nerves which is taken care of by one particular nerve, in severe CVA conditions paralysis, decreased consciousness, coma and even death can occur (Muttaqin, 2012). From the findings at St. Antonius Hospital Pontianak, there was a decubitus incident in CVA patients.

According to WHO, the disability rate due to stroke is around 50-60% of the prevalence of stroke. One fifth to half of stroke sufferers can carry out activities of life all day without assistance, but a quarter to two thirds of them have permanent disabilities (Soewarno, 1984 in Muttaqin, 2012). At the USA framingham conference, it was explained that every 20 years the follow-up of stroke was alive in the 45 to 74 year age group, it was found that 31% needed help for self-care, 20% needed help by ambulation, 71% had speech problems, and 16% have temporary or permanent disability.

The results of interviews with nurses at St Antonius Hospital Pontianak, in August 2020 there were 18 patients with strokes and 5 of them had pressure ulcers. Meanwhile, the results of interviews with 5 families of stroke patients said that most patients could not do their own activities, so they had to be fully assisted. If it is not assisted by a nurse or family to tilt right and left, the patient will continue to lie down. The family said that until the third day the nurses had not taught over bed or how to help mobilize patients.

The impact on CVA patients who experience paralysis is that there is prolonged and continuous pressure on the skin, so that local blood circulation stops for one to two hours and develops ischemia (pressure ulcers), it takes a long time to heal so that treatment days are longer and treatment costs are expensive. If a patient with hemiplegia (CVA) is accompanied by a pressure ulcer, the healing will take long, long treatment days, expensive treatment costs and the risk of infection increases (Soemarmo, 2012).

In this case, the role of nurses and family roles is needed, namely the role of nurses as health educators, nurses as health educators for paralyzed CVA patients and the patient's families in providing motivation, assistance for passive mobilization (changing positions every 2 hours) to avoid ulcers. decubitus (Soemarmo, 2012).

Early mobilization in post-stroke patients can accelerate the recovery of muscle strength, but it must be supported by the patient's behavior. Some of the factors that can influence early mobilization are: knowledge, attitudes, skills, health facilities, and behavior of the health workers themselves (Notoatmodjo, 2012). In preventing complications, it is our duty together between doctors, nurses and physiotherapists. Neurologists have programmed early post-stroke mobilization because it is hoped that it can accelerate the recovery of muscle, bone and nerve strength. The ambulation program and early mobilization exercises have been carried out as early as possible but still often show complications that are detrimental to sufferers (Rochani, 2013).

In fact, the handling of early and passive mobilization carried out by physiotherapists in the morning and working hours of only 15 minutes is felt to be very lacking, the remaining time for early mobilization is carried out by nurses. This is what the authors think is the reason why early and passive mobilization cannot be carried out optimally. For this reason, the authors want to examine how the relationship between levels of knowledge and attitudes in carrying out early mobilization behavior.

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METHODS

This type of research used in this study is pre-experimental. This study was conducted to analyze the occurrence of grade I decubitus ulcers in patients with paralysis (CVA) before and after being given passive mobilization. Independent variable In this study, passive mobilization. The dependent variable in this study was Grade I Decubitus Ulcer.

The research was conducted at St. Antonius Hospital Pontianak in September 2020 with 16 respondents. By using purposive sampling technique. The Spearman Rho test was performed with a significance level or $\alpha = 0.05$ using a computer program. If the value of sig (ρ)> 0.05 then Ho is accepted, it means that there is no effect of Passive Mobilization to Prevent Grade I Decubitus Ulcers in Patients with Paralysis (CVA) at St. Antonius Hospital Pontianak. If the value of sig (ρ) $\leq$ 0.05 then Ho is rejected, meaning that there is an effect of Passive Mobilization to Prevent Grade I Decubitus Ulcers in Patients with Paralysis (CVA) at St. Antonius Hospital Pontianak.

RESULTS

Decubitus ulcers in patients with paralysis (CVA) prior to passive mobilization

No	Decubitus ulcers before	Total	Prosentase (%)
1	There are no signs of ulcers	8	50%
2	There are signs of ulcers	8	50%
	Total	16	100%

The results of this study were 8 people (50%) had signs of pressure ulcers and no signs of pressure ulcers.

Decubitus ulcers in patients with paralysis (CVA) after passive mobilization

No	Decubitus ulcers After	Total	Prosentase (%)
1	There are no signs of ulcers	14	87,5%
2	There are signs of ulcers	2	12,5%
	Total	16	100%

The results showed that most of the respondents after passive mobilization had no signs of pressure ulcers, namely 14 people (87.5%).

Data analysis

Mc Nemar's analysis	Significance
Decubitus ulcers before and after passive mobilization	0,031

From the results of statistical tests, the significance value is $p = 0.031$ which means it is smaller than the value of $\alpha = 0.05$ ($p = 0.031 < \alpha = 0.05$) which means Ho rejects, the conclusion is that there is an effect of passive mobilization to prevent Grade I decubitus ulcers in paralyzed patients. (CVA) at St. Antonius Hospital Pontianak.

DISCUSSION

The results showed that before the passive mobilization there were signs of ulcers and no signs of ulcers, there were as many as 8 people (50%). A pressure ulcer is a skin breakdown that occurs as a result of lack of blood flow and irritation of the skin covering the protruding bone, where the skin gets pressure from a long-term bed, wheelchair, cast, splint or other hard object. Parts of the body that often experience pressure ulcers are the parts where there is a bony prominence, namely the elbows, heels, hips, ankles, shoulders,

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back and back of the head (Potter and Perry, 2010). From this description, the researcher argues that pressure ulcers can appear when CVA patients with paralysis are not mobilized which will cause increased pressure on the protruding skin.

The results of the cross tabulation above showed that there were 8 people aged 36-55 years who had no signs of ulcer wounds (50%). And those aged> 55 years who had pressure sores were 5 people. Older patients have a higher risk of developing pressure sores because their skin and tissues change with aging. Aging results in muscle loss, decreased serum albumin levels, decreased inflammatory response, decreased skin elasticity, and decreased cohesion between the epidermis and dermis. These changes combined with other aging factors will make the skin less tolerant of pressure, friction, and tearing forces (Suriadi, 2012). The skin in older patients will tear easily because the skin tissue has thinned and will easily experience erosion.

The results of the cross tabulation showed that 6 people had suffered from> 1 month long with signs of decubitus ulcers (37.5%). Five people (31.2%) had no signs of pressure sores for a long period of less than 1 month. cross tabulation between the duration of suffering and the wound before mobilization, it can be seen that there were 6 people suffering from more than 1 month who had signs of decubitus ulcers (37.5%). Mobility is the ability to change and control body position, while activity is the ability to move. Patients who lie continuously in bed without being able to change positions are at high risk for pressure sores. Immobility is the most significant factor in the incidence of pressure sores. Research conducted by Suriadi (2003) at a hospital in Pontianak also shows that mobility is a significant factor in the development of pressure sores. Patients who suffer longer, the immobility will also be longer so that the pressure on the skin will take longer, which will cause tears in the skin.

From the above description, the researcher argues that pressure sores will appear if neither passive nor active mobilization is carried out, because the pressure on the outer skin will cause friction causing skin erosion which if not known will become ulcers. The results showed that there were 8 signs of decubitus ulcers and no signs of decubitus ulcers, and it is hoped that after passive mobilization there are signs of decubitus ulcers to disappear.

The results showed that most of the respondents after passive mobilization had no signs of pressure ulcers, namely 14 people (87%). As many as 2 people prior to the mobilization of the ulcer sign of grade III, after the mobilization of the ulcer sign had decreased to grade II. Passive mobilization is an exercise given to clients who experience weakness in the arm and leg muscles in the form of exercises in bones and joints where the client cannot do it alone, so the client needs the help of a nurse or family. Passive mobilization should be carried out from the first day when the client is not allowed to leave the bed or the client who rarely moves so that muscle stiffness occurs, in this case passive mobilization is carried out. (Kozier, 2010). Passive mobilization will help prevent pressure ulcer sores, which initially have stage I symptoms, after passive mobilization the signs of the wound disappear.

The results showed that most of the respondents, namely 62% (10 people) were male. Research shows that men have more strokes than women, which is 1.25 times higher. But strangely, more women are dying of strokes. This is because men generally suffer strokes at a young age. Meanwhile, women are just the opposite, namely when they are already high (old) (Wiwit, 2010). Researchers argue that men are more likely to have strokes due to wrong lifestyles and excessive activity, and men also have the most high motivation to mobilize and women tend to be more afraid and lazy to mobilize.

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Positioning intervention is provided to reduce stress and friction on the skin. Keeping the head of the bed at 30 degrees or less will reduce the chances of developing pressure sores due to friction. The position of the immobilized client must be changed according to the level of activity, perceptual abilities, and daily routines. Therefore standard changes in position at intervals of 1 ½ to 2 hours may not prevent pressure sores in some clients. It has been recommended to use a written schedule to change and determine the client's body position at least every 2 hours. When making a position change, positioning aids should be used to protect the bony protrusions. In order to prevent injury from friction, it is better to lift rather than drag when changing positions. Clients who are able to sit on a chair are not recommended to sit for more than 2 hours (Potter, Perry 2010).

From the description above, the researcher argues that by mobilizing stroke patients it will reduce the risk of pressure ulcers. Management of clients with pressure sores requires a holistic approach that uses executive expertise from several health disciplines. Apart from nurses, executive expertise includes doctors, physiotherapists, occupational therapists, nutritionists, and pharmacists.

The results of the statistical test showed that the significance value was p = 0.031 which means it is smaller than the value of α = 0.05 (p = 0.031 <α = 0.05) which means Ho rejects, the conclusion is that there is an effect of passive mobilization to prevent the occurrence of decubitus ulcers degree I in paralyzed patients CVA) at St Antonius Hospital Pontianak.

The results of cross tabulation between wounds before and after mobilization showed that as many as 6 people (37.5%) had signs of decubitus sores before mobilization, after mobilization there were no signs of decubitus sores. The number of patients who have a moderate or high risk of developing pressure sores is influenced by many factors, both from inside and outside the patient. According to Smeltzer & Bare (2015), factors that support the occurrence of pressure sores are immobility, impaired sensory perception, decreased tissue perfusion, decreased nutritional status, friction and pulling forces, increased humidity, and gerontological considerations.

This is also supported by research conducted by Capon and colleagues in 2007 in Italy that there is a significant relationship between the incidence of previous stroke and a high risk of developing pressure ulcers in stroke patients. Someone who has had a stroke is twice as likely to develop pressure sores compared to someone who has had a stroke for the first time.

The conclusion of this study is that there is an effect of passive mobilization to prevent the occurrence of Decubitus Ulcer Derajad I in patients with paralysis (CVA) at St. Antonius Hospital Pontianak. This is in line with research conducted by Baumgarten (2006), which states that there is a significant relationship between low active and passive mobilization and the incidence of pressure ulcers in hospitals and research conducted by Tianingsih in 2010 at the Sarno Klaten Stroke Foundation which states that there is a relationship. between physical mobilization and decubitus events.

The results of the above research are in accordance with the theory put forward by Carville (2012), which suggests that immobility and inactivity are predisposing factors that cause pressure ulcers. Immobility and inactivity impact a person's ability to avoid stress, change position independently, and be susceptible to pull and friction.

CONCLUSION

Half of CVA patients at St Antonius Hospital Pontianak did not experience grade I decubitus ulcers prior to passive mobilization.

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Most of the CVA patients at St Antonius Hospital Pontianak, after passive mobilization, had no signs of pressure ulcers.
Passive mobilization can reduce the incidence of paralyzed patient pressure ulcers (CVA) at St Antonius Hospital Pontianak.

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