

## PROFILE OF ULCUS DECUBITUS PATIENTS WHICH ARE ON BED REST AT HOSPITAL IN THE CITY OF MEDAN

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### ABSTRACT

A study shows pressure ulcers are a secondary affliction that is experienced by many hospitalized patients, especially the patients with chronic diseases and patients who are very weak. However, the most frequently reported risk factors are older age, stay longer in the ICU, cardiovascular disease history, diabetes and stroke. This study aims to identify the profile of ulcers decubitus sufferers at Adam Malik General Hospital Medan and Hermina General Hospital Medan. The research method uses a quantitative descriptive approach. Data was collected using observation sheets and medical records. Sampling was done by chance with a total of 104 samples. Analysis of the data used is univariate analysis. Based on the results of the study, it was found that the average age of decubitus patients was 55 years. The majority of decubitus patients are female is 55.8%. The patient's average weight is 77 kg, average height is 161 cm, and the average body mass index is 24.8 (overweight). Based on the ulcer grade the majority is grade 2 with a percentage of 57, the average length of patient stay is 7 days. The diagnoses that led to 104 patients on bed rest varied widely. Most diagnoses were stroke (neurological disease) with a total of 48.1%.

**Keyword:** Profile Of Ulcus Decubitus, Hospital In The City Of Medan

### INTRODUCTION

Ulcer decubitus is the network area necrosis that appears when network soft stressed Among protruding bones and surface external (place lying down) in long time . Pressure Ulcer occurs due to external pressure that presses the blood vessels or due to friction and shearing forces that tear and injure blood vessels. Greater external pressure from capillary pressure and arteriolar pressure interferes the blood flow in capillary pads. When pressure is applied to the skin over the skin protrusion for two hours, ischemia and hypoxia tissue as a result of external pressure cause irreversible tissue damage (LeMone, et al, 2016).

A study shows pressure ulcers are a secondary affliction that is experienced by many hospitalized patients, especially the patients with chronic diseases and patients who are very weak. However, the most frequently reported risk factors are older age, stay longer in the ICU, cardiovascular disease history, diabetes and stroke (NPUAP, 2016).

The presence of a pressure ulcer will interfere the patient recovery process; it may also be followed by complications with pain and infection and extend the length of treatment. Even the presence of Pressure Ulcers is an overall prognosis bad marker and may contribute to patient mortality (Tayyib et al., 2016).

Decubitus incidence in International Study is as many as 1.9%-63.6%, ASEAN (Japan, Korea, China) 2.1%-18%, and in Indonesia it is quite high which is 33%. The WHO survey of 55 hospitals in 14 countries showed that 8.7% of these hospitals have patients with pressure ulcers and 1.4 million people worldwide suffered from pressure ulcers due to hospital care (NPUAP 2014 in Nofiyanto & Ivana, 2018).

According to Moore, Z., Johansen, E., & Van Etten, about 1 million people affected ulcer decubitus in America United. However, information definitive and explanation about affected lesion still limited. Incidence patient take care stay range between 27-29% with prevalence up to 69 %. Patients undergoing care orthopedics or fracture bone even reach incidence of 66%. Patients treated at homesick suffer decubitus as much as 3-10% and 2.7% chance formed new decubitus. Pressure sores or pressure ulcers interfere with the recovery process patient, maybe also followed with painful and infection so that add long treatment time, even existence wound press could becomes poor prognostic marker for patient.

The decubitus incidence can be reduced effectively if the responsible person in the health sector or hospital has developed a policy about the decubitus prevention and treatment, due to the delay in wounds healing causing disruption of social and economic consequences for the whole family (Gefen et al, 2020).

Based on the problems above, the researcher deems it necessary to conduct research related to the profile of pressure ulcer sufferers who are treated at the Adam Malik Central General Hospital and Hermina General Hospital in Medan.

Because it relates to care and quality of service to patients.

## METHODOLOGY

This study aims to identify the profile of ulcers decubitus sufferers at Adam Malik General Hospital Medan and Hermina General Hospital Medan. The research method uses a quantitative descriptive approach. Data was collected using observation sheets and medical records. The population in this study was 261, sampling was done by chance with a total of 104 samples. Analysis of the data used is univariate analysis. This study has been reviewed and has received ethics approval from the Research Ethics Committee of Sari Mutiara Indonesia University with decree number: 782/F/USM/VII/2021.

## RESULT

**Tabel 1.** Profil of Ulcus Decubitus Patients

Profil	(n=104)
<b>Old, year</b>	
Mean (SD)	54.5 (8.8)
Median	55.5 (35-76)
<b>Gender</b>	
Male	46 (44.2)
Female	58 (55.8)
<b>Weight</b>	
Mean (SD)	77.1 (9.3)
Median	65 (50-80)
<b>Height</b>	
Mean (SD)	161 (6.9)
Median	170 (151-189)
<b>Body Massa Indeks</b>	
Mean (SD)	24.8 (2.7)
Median	26.2 (14.7-24.8)
<b>Grade Ulkus</b>	
Grade 1 (n, %)	23 (22.1)
Grade 2 (n, %)	57 (54.8)

Grade 3 (n, %)	24 (23.1)
<b>Lenght of Stay</b>	
Mean (SD)	7 (1,3)
Median	11 (6-15)
<b>Diagnosis</b>	
Neurologi Disease (n, %)	50 (48.1)
Kardiovaskuler Disease (n, %)	17 (16.3)
Respiration Disease (n, %)	15 (14.4)
Musculoskeletal Desease (n, %)	1 (0.9)
Oncological Disease (n, %)	7 (6.7)
Multi-medication (n, %)	14 (13.5)

Based on the results of the study, it was found that the average age of decubitus patiens was 55 years. The majority of decubitus patients are female is 55.8%. The patient's average weight is 77 kg, average height is 161 cm, and the average body mass index is 24.8 (overweight). Based on the ulcer grade the majority is grade 2 with a percentage of 57.

## DISCUSSION

Based on the results of the study, it was found that the average age of decubitus patiens was 55 years. This age includes group elderly. On age this occur drop tolerance to pressure, movement and style swipe. This thing caused by changes on skin, like drop elasticity and vascularity, muscle loss, decreased serum levels albumin, decreased inflammatory response. Age will increase the risk of pressure sores if supported by other factors that influence development pressure sores, among others friction and pressure intensity, humidity, nutritional status, anemia, infection, fever, impaired peripheral circulation, obesity, and hexia (Potter & Perry, 2016). Research conducted by Thundiyl, J. G (2022) got

most age experience decubitus is 51-60 years old is group most age experience decubitus. Condition this caused by existence drop vascularity, elasticity, loss muscle drop serum albumin level and drop response inflammation. Chiari, P., et al (2017), his research study at hospital found the age group 61-80 years old. increment age also considered as wrong one factor risk happening pressure ulcer. Increased frequency of pathological disorders associated with Age is influenced by various mechanisms, such as poor nutritional status, malignancy, vitamin and mineral deficiency, anemia, immune disorders, cardiovascular and breathing, disease vascular peripheral and disease systemic, and chronic infections (Makrantonaki, E.,, 2017). According to Kreutztrager, M., et al, (2018) age is an intrinsic factor pressure sores because in old age there has been a decrease in elasticity and vasculature, thereby increasing the risk of pressure ulcers. Consequence the aging process generally the elderly experience a loss of muscle elasticity, decreased serum albumin levels, decreased inflammatory response, and decreased cohesion between the epidermis and dermis. The risk is getting increases because in the elderly there is a decrease in physiological abilities the body, including reduced tolerance to pressure and friction, reduced subcutaneous fat tissue, reduced collagen tissue and elastin, as well as decline efficiency collateral capillary on skin. Ability elderly for feel sensation painful consequence pressure reduce as a result of decreased sensory perception.

Based on gender, the majority of decubitus patients are female is 55.8%. Type sex no including factor risk ulcer decubitus however there is a number of factor hormones important which possible play a role in explain the differences between men

and women, namely people woman have hormone estrogen before time menopause. Results which obtained in accordance with study which conducted by Linggi, E. B, et al (2019) in Stella Maris Hospital Makassar, as many as 58% of patients with pressure sores are women. But results study which different obtained from study Ozturk, I. et al (2022) which get as much 52,6% patient ulcer decubitus manifold male genital.

The patient's average weight is 77 kg, average height is 161 cm, and the average body mass index is 24.8 (overweight). According to Peixoto, C. D. A., et al (2019) show that the higher the surface pressure (marked by body weight) then the more tall also incident ulcer decubitus on elderly and person which risky caught decubitus ulcer. In people with index mass small body (BMI) tend will experience emphasis bulge more bones big compared to people with index time more body big. Kayser, S. et al (2019) did study for see connection Among prevalence wound press, index mass body and heavy body. This survey conducted with see report incident wound press in America During 2006-2007 years. The results show that the prevalence of pressure sores is higher on patient with index time body low, and also on patient which heavy less body and overweight.

Based on the ulcer grade the majority is grade 2 with a percentage of 57. The degree of pressure ulcers can be distinguished based on characteristic clinical appearance. The clinical appearance appears as a result of the degree of skin damage that occurs. On ulcer decubitus grade 1 only visible damage to the epidermis so that description clinical which appear is a sign redness on skin. Appearance Clinically, at grade 2, a deeper reaction occurs until reach whole dermis until layer weak subcutaneous,

lookas a shallow ulcer, with clear edges and discoloration pigment skin. On degrees 3 ulcer Becomes more in, cover network subcutaneous fat and echo, abuts the fascia of the muscles. Already start got infection with network necrotic which smells. Temporary on degrees 4 occur damage whole part skin and could about fascia, muscle, bone and joints. On a number of case ulcer decubitus degree 4 could found complications such as osteomyelitis . Based on study which is conducted by MacDonald, J. (2022) got the result that 53,3% of bedrest patients among them experience ulcer decubitus degrees 1. Thing this Becomes attention because degrees ulcer decubitus will influence handling which will do .

Based on length of stay, the data obtained that the average length of patients stay is 7 days.

Results study this in accordance with the theory put forward by Sardari, M., et al (2019) who says that ulcer decubitus usually could seen on week first care. Patient duration treated at home sick give influence for happening decubitus. This thing because the longer the patient get home care sick, it means patient the have time to lay down (lay down on the bad) more long too. duration time lie down this can cause prolonged emphasis on a particular area. That old emphasis will cause disturbance circulation on area depressed. If Thing this left by Keep going continuously will result in Dead network on area that. Dead network this is what will shape wound decubitus. Whereas results study Vera-Salmerón, E., et al (2019) shows that long days take care in happening wound decubitus on patient immobilization 88.8 % appeared wound decubitus with average day length take care on day the five treatments. Network cutan Becomes damaged or shattered, lead on

destruction progressive and necrosis from network soft below it.

Patients who undergo bed rest usually is patient with disturbance neurology, disease chronic, decreased mental status, disease oncology, and orthopedics. Based on results study, the diagnosis of which led to 104 patients undergo very bed rest varies. Most diagnosis is a stroke (neurological disease) by 48.1 %. Results this different with what you get by Arif Widodo (2017) namely case orthopedic who occupies order top case most cause patient bed rest and occur ulcer decubitus. Temporary research conducted by Nisak, K., Kristinawati, B., & Widayati, N (2019) received a diagnosis of decompensation cordis as order first risk disease ulcer decubitus at Soeradji Tirtonegoro Hospital. Sufferer stroke often experience weakness or paralysis So you have to be on bed rest during treatment. Complications that can occur due to prolonged bed rest can be a fall, contractures, pain, depression and pressure sores (Surkan, M. J., et al., 2018). Patients undergoing treatment with stroke disease occupy the highest ranking for the occurrence of pressure sores, compared with patients being treated for diabetes mellitus, kidney failure and disturbance orthopedic (Riandini, R., et al., 2018).

## CONCLUSION

Ulcus decubitus is at risk for woman in the elderly age group, patients with obesity, the most common stage is stage 2 which is caused by neulological disease with a length os stay in hospital for more than 7 days.

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