

THE RELATIONSHIP OF OSTEOARTHRITIS PAIN WITH INDEPENDENCE IN DAILY ACTIVITIES OF THE ELDERLY IN BABAYAU VILLAGE, WORKING AREA OF PARINGIN HEALTH CENTER

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ABSTRACT

The elderly will experience a decline in physiological functions in the body which makes them vulnerable to health problems. Osteoarthritis is a disease degenerative affected joint cartilage joints and one of the most common types of arthritis found in the elderly. At age entering the elderly will experience physical decline, there will be a decline mass muscle as well as its flexibility. This can affect the elderly's ability to fulfill his activities everyday life which will also affect the level of independence. The aim of this research is to determine the relationship between osteoarthritis pain and independence Activity Daily life for elderly people in Babayau Village, working area of Paringin Community Health Center. The research design used in this research is an observational research design analytical with Cross Sectional design. Based on the results of the research conducted, it can be concluded that there is a relationship between Osteoarthritis Pain and Independence Activity Every day, the number of elderly people in Babayau Village in the working area of the Paringin Community Health Center a sample of 43 people, the research results show Spearman correlation test value $\rho = 0.000 < \alpha = 0.05$ using total sampling. It is also expected in every Health workers have a big role in the elderly care process, such as carrying out health care and regular health checks.

Keywords: Elderly, Osteoarthritis, Independence

INTRODUCTION

Elderly (elderly) is someone who has reached age or age 60 years and over by experiencing the aging process, aging is a process of decreasing endurance in the face stimulation from inside and outside. At this time little by little someone will experiencing change and setbacks physiological, psychological as well as social. Where will this change be influence the whole There are many aspects of health in old age pay attention to one of them that is time sleep, pain and activities carried out by the elderly which can be influenced by non-communicable diseases, one of which is osteoarthritis (Maysalasari Alba, 2022).

Osteoarthritis is known as disease joints generative or arthritis degenerative or arthritis hypertrophy or osteoarthritis are disorders most frequent joints found and frequent give rise to inability (Kushariyadi, 2010). Osteoarthritis is characterized by wear and tear bone cartilage (cartilage) hyaline joints, increased thickness as well as sclerosis from plate bones, growth

osteophytes at the edges joints stretch it capsule joints, emergence inflammation and weakening connecting muscles joints and pain often occurs joints experienced by the elderly (Arya, 2014). Nearly 40% of people over the age of 65 experience it some types of osteoarthritis symptoms. The prevalence of osteoarthritis is increasing as it increases age. Highest prevalence The occurrence of osteoarthritis is in the knees, hips and hands (Suari, et al, 2015).

From the description above, it can be drawn The conclusion that osteoarthritis often occurs in the elderly is disturbing independence activity everyday life of the elderly. Osteoarthritis though seldom cause death however this disease causes progressive paralysis and damage if not treated properly for the sufferer. Eventually painful due to osteoarthritis he suffered will impact on the patient so that the patient is unable do own activities or sufferers of osteoarthritis will be

very dependent on other people to fulfill them his activities daily . On term long It is hoped that osteoarthritis that occurs in Indonesia in general will not occur bomb time as is happening in several developed countries that will have a social and economic impact on the country. From these data , researchers have an interest in doing this research regarding connection osteoarthritis pain with independence activity daily for the elderly group in Babayau Village , the working area of the Paringin Community Health Center to see The extent of pain felt in elderly people who experience osteoarthritis can influence this independence activity daily

METHOD

The design used in this research is observational research analytical with Cross Sectional design . Cross Sectional Research is the most relevant design when assessing disease prevalence , attitudes and knowledge among patients and health workers , characterized by collection information (data) that is relevant at a particular point in time.

RESULT

Characteristics Age

In the table above, data is found regarding the characteristics age Respondents at the time the research was conducted were:

No	Age	Frequency (F)	Percentage (%)
1.	4 5-59 years old	0	0
2.	60-74 years old	37	86
3.	75-90 years old	6	14
4.	> 90 years	0	0
Total		43	100

In table above, data was found that the characteristics age there were the most respondents at the time the research was conducted that is range age 60 – 74 year or elderly category (*ederly*) as much 37 respondents with percentages as big as 86 % .

Table Gender Characteristics

No	Gender	Frequency (F)	Percentage (%)
1.	Man	12	27.9
2.	Woman	31	72.1
Total		43	100

In the table above, data is found regarding the characteristics gender there were the most respondents at the time the research was conducted that is Woman as much 31 respondents with percentages amounted to 72.1 % , while in men as many as 12 respondents with a percentage of 27.9%.

Characteristics Work

No	Work	Frequency (F)	Percentage (%)
1.	Farmer	18	41.9
2.	Private	6	14.0
3.	Trader	2	4.7
4.	IRT	15	34.9
5.	Retired	2	4.7
Total		43	100

In the table above, data is found regarding the characteristics the respondent's occupation at the time the research was conducted was the highest that is Farmer as much 18 respondents with percentages as big as 41.9%. Whereas least amount of work ie traders and retirees as much 2 respondents with percentages as big as 4.7 % .

Osteoarthritis Pain Scale Table

No	Pain Scale	Frequency (F)	Percentage (%)
1.	Mild Pain	7	16.3
2.	Moderate Pain	25	58.1
3.	Severe Pain	11	25.6
Total		43	100

In table above, it is found that the characteristics respondents had the most osteoarthritis pain at the time the research was conducted that is moderate pain as much 25 respondents with percentages as big as 58.1 % . Whereas scale painful least ie painful light as much 7 respondents with percentages amounted to (16.3 %).

Independence Table Activity Everyday for the Elderly

No	Independence Scale Activity	Frequency (F)	Percentage (%)
1.	Independent	8	18.60
2.	Dependence Light	25	58.14
3.	Moderate Dependency	9	20.93
4.	Heavy Addiction	1	2.33
Total		43	100

In table 4.6 above, it is found that the characteristics scale independence activities daily there were the most respondents at the time the research was conducted that is dependence light as many as 25 respondents with a

percentage of 58.14%. Whereas scale the least independence is heavy dependence of 1 person with a percentage of 2.33%. Most of the elderly are in Babayu Village, the Community Health Center Working Area

Paringin mostly works as farmers, 18 people (41.9%) where the majority of people work as farmers, their daily activities in carrying out ADL tend to be more independent or mildly dependent (Sari, et al., 2020). Every individual in doing life Strive to do things independently every day.

The Relationship between Osteoarthritis Pain and Independence in Daily Activities of the Elderly in Babayau Village, Paringin Community Health Center working area

Right as many as 25 respondents with a													
NO	Pain Scale	Independence Scale Activity										Σ	%
		Total Dependency		Heavy Addiction		Moderate Dependency		Dependence Light		Independent			
		F	%	F	%	F	%	F	%	F	%		
1	Severe Pain	0	0	0	0	8	18.6	3	7.0	0	0	11	25.6
2	Moderate Pain	0	0	1	2.3	1	2.3	19	44.2	4	9.3	25	58.1
3	Mild Pain	0	0	0	0	0	0	3	7.0	4	9.3	7	16.3
		0	0	1	2.3	9	20.9	25	58.1	8	18.6	43	100
Total		p value = 0.000											
		r = -0.809											

Based on table 4.7 above, it shows that of the 43 respondents, there are majority as many as 25 respondents (58.1%) had moderate and experienced pain level dependence light as many as 19 people (44.2%), level dependency with the independent category as many as 4 people (9.3%), level moderate dependence 1 person (2.3%) and level There was 1 person (2.3%) with severe dependence and no one experienced it total dependency. Meanwhile, the lowest category is respondents with a scale painful light as many as 7 people (16.3%) and 4 people (9.3%) fell into the independent category dependence light as many as 3 people (7%) and none experienced it severe or total dependence.

Based on the results of the *Spearman Rank* test analysis shows $p = 0.000 < \alpha (0.05)$, then it can be concluded that H_0 is rejected and H_a is accepted, namely There is a relationship between osteoarthritis pain and independence activity daily life for the elderly in Babayau

Village which is the working area of the Paringin Community Health Center. Relationship between These two variables show a negative correlation with value *Correlation Coefficient* -0.809 or falls into the very strong correlation category. This shows that increasingly tall the pain experienced is then the level elderly independence decreases.

DISCUSSION

Osteoarthritis Pain in Babayu Village Health Center Working Area Paringin

The research results showed that osteoarthritis pain was seen in table 4.5 with samples As many as 43 respondents in the Paringin Community Health Center Working Area Village showed the most data that is moderate pain as much 25 respondents with percentages as big as 58.1%. Whereas scale painful least ie painful light as

much 7 respondents with percentages amounted to (16.3 %). This is in line with research from Husni (2018) which states that based on *the International Association for the Study of Pain* (IASP) (1986, in Hannan, et al., 2019), pain is sensory, subjective and emotional unpleasantness related as is damage network, both in real time nor potential, or describing the conditions of occurrence damage. Meanwhile, according to the nursing definition of pain as a unpleasant situation consequence happen stimulation physique nor from fiber nerves in the body to the brain followed by reactions physical (physiological) as well as emotional. These changes This can result in the eventual deterioration of physical and psychological health will affecting the economic and social aspects of the elderly (D Nopita, 2022).

The Relationship Between Osteoarthritis Pain and Independence Activity Daily Life of the Elderly in Babayau Village, Paringin Health Center Working Area

between osteoarthritis pain and Independence Activity A Day by the Elderly in Babayau Village, Paringin Health Center Working Area, according to WHO (2015) the elderly are a population group aged 60 years or more. Somebody is said to be an elderly person who is aged 60 years or more, because factor formed cannot fulfill need basically good physically, spiritually nor social (Aria, et al., 2019).

Seniors will experience setback physiological functions in the body that cause prone to suffer from health problems. At age entering the elderly will experience physical decline, there will be a decline mass muscle as well as its flexibility. This can affect the elderly's ability to fulfill his activities everyday that will also be influence the level independence so that this will impact on the quality of life of the elderly themselves (Widiastuti, et al., 2021). One thing that can cause the elderly's independence in meeting their daily needs to be disrupted is due to a decrease in the function of biological mechanisms in the body, namely osteoarthritis.

CONCLUSION

Results of research analysis on the relationship between osteoarthritis pain and

independence Activity Everyday life for elderly people in Babayau Village, the working area of the Paringin Community Health Center can be concluded as follows:

1. Most respondents showed the most data that is moderate pain as much 25 respondents with percentages as big as 58.1 %. Whereas scale painful least ie painful light as much 7 respondents with percentages amounted to (16.3 %).
2. Most of the respondents shows the most data that is light dependency as much 25 respondents with percentages as big as 58.1 4 % . Whereas scale the least independence is heavy dependence of 1 person with a percentage of 2.33%.
3. There's a relationship between Osteoarthritis Pain with Independence Activity Everyday life for elderly people in Babayau Village, the working area of the Paringin Community Health Center ($p = 0.000 < \alpha = 0.05$).

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REFERENCES

- Agustina, Silvia Ari, And Melisa Putri Rahmadhena. 2020. "Analysis Of Determinants Of Toddler Nutrition Problems." *Journal Of Health* 11(1): 008–014. <https://doi.org/10.35730/Jk.V11i1.685>.
- A Potter, & Perry, AG (2018). *Nursing Fundamentals Textbook: Concepts, Processes, And Practice*, 4th edition, Volume.2. Jakarta: EGC.
- Abdurrahman, A., D. Handayani. And DD Ramadanti. (2019). Effect of exercise Isometrics on Skill functional function of elderly people suffering from arthritis in Amboekambang Village. 1030-1031
- Adventus, M., Jaya, IMM, & Mahendra, D. (2019). *Health Promotion Textbook. In Health Human Resources Education Center* (1st ed., Vol. 1, Issue 1, pp. 1–91).
- Alba, A.D., Static, S., & Therapy, D. (2022). With Osteoarthritis Through the Application of Static and Dynamic Stretching to Reduce Pain Intensity *i*. 2(1), 1–14
- Al-Fathonah, RU, Education, J., Islam, D., Ulfa, R., Tinggi, S., Tarbiyah, I., & Bara, B. (2021). *Research Variables in Educational Research*.
- American Nurses Association (ANA), (1985) In Burns, N. & Grove, SK, 2001. *The Practice of Nursing*. Research: Conduct, Critique and Utilization. 4th Edition ed., Pennsylvania
- Ariyanti, R., Sigit, N., & Anisyah, L. (2021). Health Education Related to Self-Medication Efforts Osteoarthritis Disease in the Elderly. *Selaparang Journal of Progressive Community Service*, 4(3), 552.

- Arya, RK; Jain V . (2014) . *Osteoarthritis of the knee joint: An overview* . JIACM 2013; 14(2): 154-62
- Asyfh , A., Usraleli , U., Magdalena, M., Sakhnan , S., & Melly, M. (2020). The Relationship between Obesity and the Incidence of Hypertension in the Sidomulyo Inpatient Health Center Work Area . *Batanghari University Jambi Scientific Journal* , 20 (2), 338–343. <https://doi.org/10.33087/JIUBJ.V20I2.926>
- Kalimantan Provincial Health Office . (2020). *Health Profile 2020*. <http://dinkes.kalselprov.go.id/profil-kesehatan-tahun-2020.html>
- Engel. (2017). *Management Physiotherapy in Cases of Osteoarthritis of the Right Knee at the RSUD Sukoharjo* . Paper Knowledge . Toward A Media History Of Documents.
- Febiantri , N., & Machmudah , M. (2021). Reducing Pain in Post Sectio Caesarea Patients Using Benson Relaxation Technique Therapy . *Young Nurses* , 2 (2), 31.
- Gadde, KM, Martin, CK, Berthoud, H.R., & Heymsfield , S.B. (2018). Obesity: Pathophysiology and Management. *Journal of the American College of Cardiology* , 71 (1), 69–84. <https://doi.org/10.1016/J.JACC.2017.11.011>
- Herdayati , S., Pd, S. (2019). *Research Design and Data Collection Techniques in Research* . SS-2502-3632 I. 2356-0304 J., & 2019, undefined.
- Indonesian Ministry of Health (2017) ' *Situation of the elderly in Indonesia in 2017: Structure picture age of the Indonesian population in 2017* ' , Center for Data and Information , pp. 1--9.
- Indonesian Ministry of Health. (2018) . *Indonesia Health Profile 2017* . Jakarta: Republic of Indonesia Ministry of Health.
- Kesmodel, US, & Kesmodel, S. (2018). Cross-sectional studies – what are they good for? *Acta Obstetrica et Gynecologica Scandinavica* , 97 (4), 388–393.
- Kushariyadi . (2010) . *Nursing Care for Elderly Clients* . Jakarta : Salemba Medika.
- Lenaini , I. (2021). *Retrieval Technique Purposive Samples and Snowball Sampling* . Historical : Journal of History Education Studies, Research and Development , 6 (1), 33–39.
- Maryam, R. Siti et al . (2011). *Know Elderly and their care* . Jakarta: Salemba Medika.
- Muttaqin, A. (2012). *Nursing Care for Clients with System Disorders* . Jakarta: Salemba Medika.
- Ningrum, N. (2021). *Mobility Physical on Diagnosis Osteoarthritis Medical* in Pasirian Village Lumajang . Scientific Writing , 95 .
- Nurrahmah , AMP, Rismaningsih , FS Pd. The . , MS, Ul'fah Hernaeny , MP, Linda Pratiwi. M.Pd , Wahyudin , MP, Abdul Rukyati . M.Pd , Fitri Yati, A. Md. RO . , SKM . , M. Pd . , Lusiani , S. Pd. Si . , M. Pd . , Dinar Riaddin , MP, & Dr. Jan Setiawan, SSMS (2021). *Introduction to Statistics 1 Google Books* . Jakarta: Salemba Medika.
- Padilla. (2013) *Internal Medicine Nursing Care* . Yogyakarta: Nuha Medika
- Pratama, AD (2019). *Intervention Physiotherapy in Cases of Osteoarthritis Genu at Gatot Soebroto Army Hospital* . Social Journal Humanities Applied , 1 (2), 21-34.
- Rahardjo, M. (2017). *Case study research design : Experience empirical* .
- Rosdiana , N., & Hermawan, SAA (2019). The relationship between body mass index and the incidence of osteoarthritis in the elderly in the Handapherang Community Health Center working area . *Information Media* , 15 (1), 69-73.
- Seran, R., Bidjuni , H., & Onibala , F. (2016). The Relationship Between Gouty Arthritis Pain and Elderly Independence at the Towuntu Timur District Health Center Pasan Regency Southeast Minahasa . *Nursing journal* , 4 (1).
- Suari , Bunga Amilia, Muhammad Ihsan, and Laode Burhanuddin. (2015). "Image of the Sufferer Osteoarthritis In Surgery Arifin Achmad Hospital Period January 2011-December 2013." *Student Online Journal (JOM) in the Field of Medicine* 2.2 1-10.
- Sumbara , S., Muliani, R., & Puspitasari , S. (2020). The Relationship between the Level of Independence and the Quality of Life of the Elderly . *National Conference (Konas) on Mental Health Nursing* , 4 (1), 81-86.
- Sunaryo, Wijayanti , Rahayu. (2016). *Gerontic Nursing Care* . Yogyakarta : CV ANDI OFFSET.
- Tamher and Noorkasiani . 2009. *Elderly Health with an Approach Nursing care* . Jakarta . Salemba Medika.
- WHO. 2016. WHO | *Chronic rheumatic conditions* . WHO.
- Wideman, T.H., Sullivan, M.J.L., Inada, S., McIntyre, D., Kumagai, M., Yahagi, N., Turner, J.R., Upton, J., Burns, R.J., Rothman, A.J., Michie, S., Johnston, M., Nakashima, M., Vedhara , K., Dawe, K., Wong, C., Gellman, M.D., Brimmer, D., Zielinski-Gutierrez, E., ... Woltz, P. (2013). Body Mass Index. *Encyclopedia of Behavioral Medicine* , 247–249.
- Widyaningrum , DA, & Umam , FN (2020). The Effect of Joint Pain on Quality Sleep and Quality of Life in Elderly Sufferers Osteoarthritis . *Journal of Nursing* , 13 (2), 7-7.
- World Health Organization. (2015) . *World Report on Aging and Health. Luxembourg* : WHO Library Cataloging-in-Publication Data.
- World Health Organization. (2021) . *Musculoskeletal Conditions* .