LITERATURE STUDY OF THE RELATIONSHIP OF PAIN INTENSITY WITH THE QUALITY OF LIFE OF OSTEOARTHRITIS ELDERLY.

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ABSTRACT

Osteoarthritis is possible disease cause inability physique someone who attacks all joints especially in the elderly . Symptom the most frequent main felt osteoarthritis sufferers are pain and stiffness in the joints , symptoms this is what causes it possible swelling limit room motion, so sufferer disturbed in do activity everyday which results decline quality life in osteoarthritis sufferers . For know connection intensity painful with quality life elderly osteoarthritis. This study is studies literature in the form of literature review. Search article use electronic based, such as *Google Scholar, PubMed, and Cambridge* with using keywords *Indonesian* and *English* . Matter This done For find appropriate article with criteria studies literature Then article review was carried out . There were 10 articles obtained from Screening results . Based on results analysis Of the 10 articles , 7 articles were found that showed this exists connection intensity painful with quality life elderly osteoarthritis. Expected for study furthermore can do more research Good Again , the information provided Far more complete as well as articles used is the most recent article so that No give rise to hesitation for researchers furthermore

Keywords : Quality of Life for the Elderly , Pain, Osteoarthritis

INTRODUCTION

Diseases in the elderly that become problem health biggest in this world is osteoarthritis. This osteoarthritis disease is possible disease cause inability physique someone who attacks all joints especially in the elderly . Disease This own great influence big to individual in the world that is found results is 250 million people or 4% of all over individual in this world is vulnerable valence with osteoarthritis (Arismunandar, 2015) . Osteoarthritis is a disease disease that becomes problem The main problem in the elderly in Indonesia and 70% is experienced by those who are older over 50 years be marked with the rate of osteoarthritis is still Enough tall that is reached 36.5 million people (RISKESDAS, 2018) . Disease This caused Because damage structure in joints , which are partial big located in hand , as well supporting joints burden body like knees , hips and back due to the continuous pressing process continuously during many years (Davies, 2016) . This osteoarthritis disease nature multifactorial caused by various factor risk like carry on age , obesity , trauma to the joints , disorders genetics in bones cartilage and excessive pressure on the joints that can caused by exercise (Asikin *et al.* , 2016) . Symptom the most frequent main felt osteoarthritis sufferers are pain and stiffness in the joints (Davies, 2016) . Joint pain can happen when do activity too overuse and stiffness in the joints because No exists movement or activity in joints , generally arise in the morning day when get up Sleep or after rest in the afternoon day (Zakiyah, 2015) . Joints can also experience reddish , warm accompanied with painful press Then there is a feeling of stiffness , symptoms this is what causes it possible swelling limit room motion sufferers , and also can influence well-being physique sufferers , so sufferer disturbed in do activity every day which results decline quality life in osteoarthritis sufferers . (Wiarto, 2017) .

Quality life is perception every individual in operate related life with targets, hopes , pleasure and attention (Khorni, 2017) . Quality survival in osteoarthritis patients have a number of indicator main that is health physical , ability functional , health psychology , relationships social and environmental social . Decline quality life that occurs in partial osteoarthritis sufferers big related with the pain that

attacked him so that limit room motion sufferers , decrease ability Work sufferers , improve emotion sufferers and even No seldom can make osteoarthritis sufferers experience depression and decline mental health (Andesty , 2017) . One of indicator main thing that can be done influence quality life is health physical (Khorni, 2017) . In osteoarthritis sufferers who experience disturbance health physique own a number of complaint like pain in the joints (Wiarto, 2017) . According to the International Association for the Study of Pain (IASP), pain is defined as: something experience sensory and emotional ones are not pleasant consequence from damage actual and potential networks , p That is sign beginning shown that patient the currently experience disability , pain felt by osteoarthritis sufferers including painful non- neurogenic neuromusculoskeletal , usually often called as altralgia , that is pain caused by pathological processes in the joints (Davies, 2016) . According to research conducted by Jae Young Hong (2016), on quality life osteoarthritis sufferers find that elderly people who experience osteoarthritis have quality life bad compared to with seniors who don't have osteoarthritis. That matter caused elderly people who suffer from osteoarthritis experience decline function physique because exists inflammation joints caused by damage joints . Then as for research conducted by Ismail (2016), obtained results that exists significant influence between age , employment status , and intensity painful to quality survival in osteoarthritis patients . Furthermore research conducted by Pang, et al (2015) on patients suffering from osteoarthritis shows that intensity painful influence quality of life [9] . based on explanation on this osteoarthritis disease is possible disease cause inability physique someone who attacks all joints especially in the elderly . (Pang *et al.* , 2015) Therefore That very influential to quality live to age elderly , in sufferers of osteoarthritis who experience disturbance health physique own a number of complaint like frequent pain in the joints felt or experienced by age elderly and has an impact on quality living in the elderly Because elderly people who are already become auto osteoarthritis sufferers get decline quality life that occurs in partial osteoarthritis sufferers big related with the pain that attacked him so that limit activities and space motion sufferers , decrease ability Work sufferers , improve emotion sufferers and even No seldom can make osteoarthritis sufferers experience depression and decline mental health in the elderly . Based on explanation on so researcher interested For do studies literature about " Relationships intensity painful with quality life elderly osteoarthritis".

METHODS

Study This is study with use literature review method , namely A synthesis from nature of literature study systematic , clear , thorough , with identify , analyze and evaluate through collection of existing data There is with method Explicit and involving search method study critical in election study . In research studies literature carried out here , source obtained from journal .

RESULTS

Table 1. In research this obtained article

No	Author , Year	Title	Research result
1.	Ni Putu Ayu Pande Arista Dewi, et al . 2017	Relationship between Health Status Based on WOMAC and Quality of Life Based on WHOQOLBREF in Patients Osteoarthritis Knee at Sanglah Hospital	1. From 38 respondents analyzed data obtained that (26%) are patient men and (73%) are patient women and the entire average subject study aged more from 63 years . 2. Based on results study classification quality life based on WHOQOL-BREF, namely (2.6%) respondents own quality life bad , (31%) have quality life moderate , (58%) good and very Good as much as (7.8%) and in research This No obtained quality life very bad . 3. Got it connection significant positive (r= 0.345 , p=0.034) between health status on average WOMAC score with quality life based on average WHOQOLBREF score . 4. Got it connection between average WOMAC score with health domains physical on

No	Author	Title	Results
			WHOQOLBREF is related significant negative ($r = -0.324$, $p=0.048$).
			5. Got it positive relationship between average WOMAC score with psychological domain ($r=0.328$, $p=0.044$), relationship social ($r=0.325$, $p=0.047$) environmental ($r=0.530$, $p=0.001$) significant
2.	Thiar Theria Amanda, et al . 2015	Connection Degree of Pain with Patient Quality of Life Osteoarthritis at DR HARDJON O PONOROGO Regional General Hospital Neurology Polyclinic	1. With Pearson's test was carried out patient experiencing osteoarthritis degrees painful light as many as 10 people (25%), where the patient with degrees painful light quality his life good / no disturbed .
			2. With the patient's Pearson test was performed osteoarthritis with degrees painful currently as many as 17 people (42.5%) of which 5 people (12.5%) occurred disruption to quality his life while 12 people (30%) had quality his life No disturbed .
			3. With the patient's Pearson test was performed osteoarthritis with degrees painful heavy as many as 13 people (32.5%) and all experience decline quality life .
			4. There is a meaningful relationship between degrees painful with quality alive in the patient osteoarthritis p value <0.0001 and $r=-0.965$. Study This prove that enhancement degrees painful worsen quality alive in the patient osteoarthritis .
3.	Wijayanto et al (2021)	Life Based on WHOQOLBREF in Patients Osteoarthritis Knee at Sanglah Hospital	1. OA sufferers are middle aged (45-60 years) , namely there were 10 people (66.7%). Elderly age (60-75 years) was 5 people (33.3%).
			2. Subject dominated with women , that is as many as 11 people (73.3%), subjects manifold sex man only totaling 4 people (26.7%).
			3. Based on index mass body there are 9 people (60%) who have it normal weight , 2 people (13.3%) had underweight and 4 people (26.6) had fat body weight .
			4. OA sufferers with symptom clinical light totaling 2 people (13.3%), symptoms clinical currently namely 6 people (40%), symptoms clinical weight 5 people (33.3%) and have symptom clinical very heavy amounting to 2 people (13.3%).
			5. Based on results evaluation quality life 6 people (40%) had knee OA patients quality low life , 4 people (26.7 %) have quality life enough , 3 people (20%) have quality life both and 2 people (13.3%) have quality life very Good . Normality test results with using the Shapiro Wilk test with WHOQOL-BREF group for WOMAC group concluded that There is strong relationship between intensity painful with quality life in sufferers of knee osteoarthritis
4.	Sary, 2019	The relationship between joint pain and Patient Quality of Life	1. Sufferer osteoarthritis more Lots suffered by women (59.0%) and many occurs with age more from 60 years and above (59.0%).

		Osteoarthritis at the Community Health Center Nanggalo Padang City 2019	2.	Sufferer osteoarthritis almost half experience intensity painful moderate (39.7%)
			3.	Sufferer osteoarthritis almost half own quality life low (52.6%)
			4.	There is meaningful relationship between painful joints with quality alive in the patient osteoarthritis with p-value=0.003
5.	KHAIRA TIH, 2016	Relationship n Degree of Pain With Quality of Life in Patients Primary Osteoarthritis at the Orthopedic Clinic at Padang Hospital	1.	Sufferer osteoarthritis more Lots suffered by women and many occurs in > 60 years .
			2.	Sufferer osteoarthritis part big own degrees painful heavy .
			3.	Sufferer osteoarthritis part big own quality life bad .
			4.	There is connection between degrees painful with quality alive in the patient primary osteoarthritis .
6.	Jian Pang, et al . 2015	Influence of pain severity on health-related quality of life in Chinese knee osteoarthritis patients	1.	From 466 respondents data obtained that 84 (18%) were men and 382 (82%) were Woman .
			2.	Based on results study in a way statistics significant correlation found between every mark subscale great WOMAC and scores SF-36 subscale (P<0.05).
			3.	Data obtained that function SF-36 physically significant correlate in a way negative with score WOMAC subscales in knee osteoarthritis patients .
			4.	Data obtained that painful critical relate negative with quality life osteoarthritis patients .
			5.	Data obtained that pain that occurs in women with osteoarthritis have connection strongest with SF-36 PCS and MCS scores .
			6.	Got it data results that severity of pain own more impact significant impact on HRQoL than characteristics patient , symptoms others and levels severity radiography .
7.			1.	Research result showing that of 51 respondents obtained mark intensity the most pain is on a scale of 6 , namely painful currently as much as 41.2%. On value average quality life respondents 4.21 obtained a p value of 0.015 which shows that correlation between intensity painful with quality life is meaningful . Where is the value The correlation is 0.338 (r = 0.338) . that direction correlation positive with strength weak correlation .
8.	Afina et al , 2019	Connection Degrees of Pain and Classification Radiology with Patient Quality of Life Osteoarthritis Knee	1.	connection degrees painful with quality live on aspects pain and vitality as well as connection classification radiology of OA with quality live on aspects function social .
9.	Marcio Massao Kawano, et al . 2015	Assessment of quality of life in patients with knee osteoarthritis	1.	By overall , average age of the sample was 61.2 years and the time of diagnosis of knee osteoarthritis is 8.1 years .
			2.	Test results show that patients suffering from knee osteoarthritis own more perception low about quality his life .
			3.	Data obtained that There is strong connection

No.	Author	Title	Results
			between level low education and quality low life in group individual This .
			4. In capacity SF- 36 functional active participants obtain the mean score was 45.8 and for retirees 33.2 (P=0.03).
			5. Data obtained that respondents who suffered from osteoarthritis more severe that shows that more from half sample That own indication surgery according to evaluation ahilback .
			6. Restrictions functional depending on the level education , values from this SF-36 show that quality more life good for those with more education tall because level low education will There is influence negative so that only obtain A little information about prevention and treatment of osteoarthritis.
10.	Dance et al (2019)	Connection Pain Intensity With Patient Quality of Life Osteoarthritis Knees at Prof. Hospital . Dr. WZ Johannes Kupang	1. From respondent data , groups aged 61-70 years is group older age Lots diagnosed affected by OA , namely as much as 52.3%. Group ages 51-60 have more amount A little that is as much as 47.7%. And 81.8% of the sample in study This dominated by women , while 18.2% of the sample is man .
			2. From respondent data obtained intensity painful respondents the most is in the 41-50 range ie as much as 29.5% with average intensity painful respondents amounting to 49.1818 with interpretation painful currently .
			3. From respondent data obtained mark average from total quality value life equal to 2.8778545 which means average quality life respondents is Good .
			4. There is meaningful relationship between intensity pain and quality life patient , where the more tall intensity painful so quality life knee OA patients at RSUD Prof. Dr. WZ Johannes Kupang will the more worsened

DISCUSSION

Study results article The first research was by Ni Putu et al in (2017) at Sanglah Hospital . Research method nature analytic through cross sectional approach (Ayu Pande Arista Dewi, Subawa and Artha Wiguna, 2018) . Population in study This a total of 38 knee OA patients who had diagnosed in a way clinical . Retrieval technique sample is patient given two questionnaire , ie WHOQOL-BREF questionnaire for evaluate quality life and the WOMAC questionnaire for assess health status . Data analyzed using IBM SPSS 24 and done bivariate analysis with use analysis correlation *Pearson* and *Spearman* . Got it results from 38 respondents analyzed data obtained that (26%) are patient man and (73%) are patient women and the entire average subject study aged more from 63 years . Based on results study classification quality life based on WHOQOL-BREF, namely (2.6%) respondents own quality life bad , (31%) have quality life moderate , (58%) good and very Good as much as (7.8%) and in research This No obtained quality life very bad . Got it connection positive significant (r=0.345, p=0.034) between health status on average score WOMAC with quality life based on average WHOQOL- BREF score . Got it connection between average WOMAC score with health domains physical health on WHOQOL- BREF is related negative significant (r=-0.324, p =0.048). Got it

connection positive between average WOMAC score with psychological domain (r=0.328, p=0.044), relationship social (r=0.325, p=0.047) environmental (r=0.530, p=0.001) significant.

Study results article second one researched by Thiar et al in (2015) with use Type method study This use analytic observation with Cross Sectional design . Amount respondents is 40 elderly . Technique taking sample is purposive sampling. Degrees painful can assessed with use NRS score , meanwhile measurement quality life use SF score- 36.Test statistics used is the Pearson Test. Got it results patient experiencing osteoarthritis degrees painful light as many as 10 people (25%), where the patient with degrees painful light quality his life good / no disturbed . Patient osteoarthritis with degrees painful currently as many as 17 people (42.5%) of which 5 people (12.5%) occurred disturbance on quality his life while 12 people (30%) had quality his life No disturbed . Patient osteoarthritis with degrees painful heavy as many as 13 people (32.5%) and all experience Quality decrease life . There is a meaningful relationship between degrees painful with quality life in patients osteoarthritis p value < 0.0001 and r=-0.965. Study This prove that enhancement degrees painful worsen quality alive in the patient .

Study results article the third researched by Wijayanto et al (2021) carried out with retrieval techniques sample is patient given two questionnaire , ie WHOQOL-BREF questionnaire for evaluate quality life and the WOMAC questionnaire for assess health status . Data analyzed using IBM SPSS 24 and done bivariate analysis with use analysis correlation *Pearson* and *Spearman* . On research This took 15 respondents with technique taking purposive sampling sample . On research This use type study quantitative with analytical observational and methods cross sectional study approach for know intensity painful from respondents using WOMAC (The Western Ontario and McMaster Universities Arthritis Index). Whereas For measure quality life elderly knee osteoarthritis sufferers using WHOQOL-BREF. Based on results study obtained that OA sufferers are middle aged (45-60 years) , namely there were 10 people (66.7%). Elderly age (60-75 years) was 5 people (33.3%). Subject dominated with women , that is as many as 11 people (73.3%), subjects manifold sex man only totaling 4 people (26.7%). Based on index mass body there are 9 people (60%) who have it normal weight , 2 people (13.3%) had underweight and 4 people (26.6) had fat body weight . OA sufferers with symptom clinical light totaling 2 people (13.3%), symptoms clinical currently namely 6 people (40%), symptoms clinical weight 5 people (33.3%) and have symptom clinical very heavy amounting to 2 people (13.3%). Based on results evaluation quality life 6 people (40%) had knee OA patients quality low life , 4 people (26.7 %) have quality life enough , 3 people (20%) have quality life both and 2 people (13.3%) have quality life very Good . Normality test results with using the Shapiro Wilk test with WHOQOL-BREF group for WOMAC group concluded that There is strong relationship between intensity painful with quality life in sufferers of knee osteoarthritis.

Study results article The fourth researched by Sary (2019) is descriptive with approach *cross-sectional study*. Population study This is patient osteoarthritis treated at the Community Health Center Nanggalo Padang City in the month December 2019 with sample of 78 respondents . Intensity painful be measured with scale measuring *numeric rating scale (NRS)* and quality life be measured with SF-36 questionnaire . Got it results Sufferer osteoarthritis more Lots suffered by women (59.0%) and many occurs with age more from 60 years and above (59.0%). Sufferer osteoarthritis almost half experience intensity painful moderate (39.7%), Sufferers osteoarthritis almost half own quality life low (52.6%) Yes meaningful relationship between painful joints with quality alive in the patient osteoarthritis with *p-value=0.003.*

Study results article the fifth studied Khairatih (2020) with using *Cross sectional* studies carried out on patients primary osteoarthritis in poly orthopedics at Dr M. Djamil Hospital , Semen Padang Hospital and RSI Ibnu Sina Padang in November 2016 with sample amounting to 42 respondents . Degrees painful be measured with scale measuring *numeric rating scale (NRS)* and quality life be measured with SF-36 questionnaire was obtained results Sufferer osteoarthritis more Lots suffered by women and many occurs in > 60 years . Sufferer osteoarthritis part big own degrees painful heavy .

Sufferer osteoarthritis part big own quality life bad . There is connection between degrees painful with quality alive in the patient primary osteoarthritis .

Study results article sixth one researched by Jian Pang, et al . 2015 with use Study This are cross-sectional, descriptive and correlational . Amount sample of 466 patients with knee osteoarthritis Degrees painful be measured with scale measure WOMAC and quality life be measured with SF-36 questionnaire . From 466 respondents data obtained that 84 (18%) were men and 382 (82%) were Woman . Based on results study in a way statistics significant correlation found between every mark subscale great WOMAC and scores SF-36 subscale (P<0.05). Data obtained that function physique SF-36 according to significant correlate in a way negative with score subscale WOMAC in knee osteoarthritis patients . Data obtained that severe pain relate negative with quality life osteoarthritis patients . Data obtained that painful what happens to women with osteoarthritis has connection strongest with SF-36 PCS and MCS scores . Got it data results that severity of pain own more impact big on HRQoL than characteristics patient , symptoms others and levels severity radiography .

Study results article the seven studied Pratiwi (2015) with cross sectional method carried out on patients osteoarthritis in poly otropedics at RSUD Dr. A. Dadi Tjokrodipo Bandar Lampung in November 2014 with sample amounting to 51 respondents taken by consecutive sampling. Statistical tests used is spearman Degree painful be measured with scale measuring *numeric rating scale (NRS)* and quality life be measured with SF-36 questionnaire . Got it results Research results showing that of 51 respondents obtained mark intensity the most pain is on a scale of 6 , namely painful currently as much as 41.2 %. At average value of quality life respondents were 4.21, and obtained a p value of 0.015 which shows that correlation between intensity painful with quality life is meaningful . Where is the value The correlation is 0.338 (r = 0.338) . that direction correlation positive with strength weak correlation .

Study results article the eighth one researched by Afina et al (2019) with use approach *cross-sectional* . A total of 85 OA patients have been chosen in a way *consecutive* and assessed quality his life consisted of on eight component use SF-36 questionnaire , degree the pain use *numeric rating scale* (NRS), as well in a way radiology based on Kellgren-Lawrence (KL) classification . As well as quality life be measured with SF-36 questionnaire . Got it connection degrees painful with quality live on aspects pain and vitality as well as connection classification radiology of OA with quality live on aspects function social

Study results article the ninth researched by Marcio Massao Kawano, et al . 2015 with use cross-sectional method . Amount respondents were 93 patients diagnosed with osteoarthritis. Retrieval technique sample is with method use questionnaire *numeric rating scale (NRS) and for quality life* interview respondents with SF-36 questionnaire . Overall , the average age of the sample was 61.2 years and the time of diagnosis of knee osteoarthritis is 8.1 years. Test results show that suffering patients knee osteoarthritis own more perception low about quality his life . Data obtained that There is strong connection between level low education and quality low life in group this individual . In capacity SF-36 functional active participants obtain the mean score was 45.8 and for retirees 33.2(P=0.03). Data obtained that respondents who suffer from more osteoarthritis severe that shows that more from half sample That own indication surgery according to Achievement assessment . Restrictions functional depending on the level education , values from this SF-36 show that quality more life Good on those with more education tall because level low education will There is influence negative so that only obtain A little information about prevention and osteoarthritis treatment .

Study results article the tenth researched by Tarigan et al (2019) with use Analytical methods observational with design *cross-sectional.* With 44 respondents were taken with method *consecutive sampling* . questionnaire used For measure painful patient is *numeric rating scale (NRS) and for quality life* From respondent data , groups aged 61-70 years is group older age Lots diagnosed affected by OA , namely as much as 52.3%. Group ages 51-60 have more amount A little that is as much as 47.7%. And 81.8% of the sample in study This dominated by women , while 18.2% of the sample is man . From respondent data obtained intensity painful respondents the most is in the 41-50 range ie as much as 29.5% with average intensity painful respondents amounting to 49.1818 with interpretation painful currently . From respondent data obtained mark average from total quality value life amounting to 2.8778545 which means average quality life respondents is Good . There is meaningful relationship between intensity pain and quality life patient , where the more tall intensity painful so quality life knee OA patients at RSUD Prof. Dr. WZ Johannes Kupang will the more worsened interview respondents

with the SF-36 questionnaire is known that from 10 articles 10 patients on average experience pain that is strong and also average patient own quality bad life so that from tenth article can concluded that there is strong relationship between intensity painful with quality life elderly osteoarthritis.

Once done study of 10 articles on obtained that method used For measure quality painful is *numeric rating scale (NRS) and* WOMAC questionnaire *whereas For quality life* use SF-36 questionnaire . And the WHOQOL-BREF questionnaire . Apart from *for quality life* use SF-36 questionnaire . And the WHOQOL-BREF questionnaire . Besides that is known that from 10 articles 10 patients on average experience pain that is strong and also average patient own quality bad life so that from tenth article can concluded that there is strong relationship between intensity painful with quality life elderly osteoarthritis.

CONCLUSIONS

Based on the 10 articles discussed found that 7 out of 10 articles state that patient experience painful currently on average the NRS value is 4-6 whereas For quality life that the patient has obtained that of 10 articles , 6 articles state quality life of the elderly is quality less life OK , p This caused with increasing degrees pain in osteoarthritis patients then will cause patient experience disturbance health so that limit room motion sufferers , decrease ability Work sufferers , improve emotion sufferers and even No seldom can make osteoarthritis sufferers experience depression and decline mental health.

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