



INFLUENCE THERAPY *GUIDED IMAGERY* ON THE INTENSITY OF MOTHER'S PAIN *POST SECTIO* CAESAREA

Sumirah Budi Pertami ¹, Nurul Hidayah ¹, Fitriana Kurniasari S ¹

Ministry of Health Malang Health Polytechnic ¹

Correspondent email : sumirah_budi@poltekkes-malang.ac.id

Abstract

Sectio caesarea is a surgery to deliver the fetus through an incision in the abdominal wall. Post caesarean section pain can be reduced with pharmacological and non-pharmacological measures . The non-pharmacological measures studied in this research were guided imagery . The aim of this study was to determine the effect of giving a combination of guided imagery therapy on the intensity of maternal pain after caesarean section. This research design uses a Quasy Experiment. The sampling technique used was non-probability sampling, purposive sampling type with a total of 32 respondents. The results of the research in the treatment group showed that most of the results (81.4%) were on a mild pain scale and in the control group most of them (100%) were on a moderate pain scale . The results of the Wilcoxon rank-sum test in the treatment group were Sig. (2-tailed) = 0.000, which means that there is a significant influence on the intensity of pain before and after the administration of guided imagery on the pain intensity of mothers post caesarean section. The Man Withney test result is Sig. (2-tailed) = 0.000, which means that H0 is rejected. H1 is accepted. There is a significant difference in pain intensity between the treatment group and the control group. It is hoped that post-caesarean section mothers will use this combination of therapy to help relieve the pain they are experiencing.

Keywords: MotherPostSectioCaesarea,Pain,RelaxationTechniqueGuided Imagery

INTRODUCTION

Childbirth process is one of circumstances normal physiology begins from happen uterine contractions up to out baby from the vagina or through *sectio cesarean* . Childbirth occurs can running normally but also can happen complications caused by many factor . One of the delivery methods chosen as a way out is *caesarean section*. *Sectio Caeseria* is now a trend Which Lots interested by Mother Which will do labor Because Besides being more effective, it can be used as an option for mothers who do not want to give birth normally.

Pain management in hospitals is now starting to shift from previously focusing on providing pharmacology to now expanding to providing non-pharmacological therapy. Although pharmacological measures are considered effective in reducing patient pain, they also allow the emergence of side effects ranging from moderate to severe. The side effects of analgesics include nausea, dizziness, constipation, kidney disorders, liver function disorders, heart function disorders and allergic reactions to the drug. Therefore, as an alternative for pain management, various non-pharmacological measures are now being developed, such as *massage techniques* and *guided imagery music* .

According to (WHO) Word Health Organization in (Agustina, N.,

Anantasari, R., & Nataliswati, 2021) of more than 130 million births that occur every year, an estimated 303,000 result in maternal death. The number of stillbirths has decreased by 19.4% between 2000 and 2015, each year decreasing by 2%. In 2015 there were 2.6 million births dead in a way global, with more from 7178 death per day. The majority of these deaths occur in developing countries. The birth process in developing countries based on *World Health Organization* (WHO) data in 2015 in the last 30 years of all birth processes is 10% to 15%. Process labor in every country with indication sections caesarean is 5% -15%, in government hospitals the birth rate reaches 11% while in private hospitals the birth rate is higher compared to with government hospitals, namely 30 %. Number infant mortality in Asia in 2017 was 21.3% per 1000 live births, the second highest figure after Africa (26.7%) (Agustina, N., Anantasari, R., & Nataliswati, 2021) . In 2018, 78,736 mothers in Indonesia gave birth with 81% normally and 18% SC . The highest SC rate was 31.3% in DKI Jakarta and the lowest 6.7% in Papua. The proportion of birth methods using SC in Central Java ranks first with the number of births at 15,043, then East Java at 9,832 births, after that West Java at 9,291 births (Ministry of Health, 2018) . Based on the results of a preliminary study conducted at Inpatient Installation A, Wawa Husada Kepanjen Hospital on January 4 2023, information was obtained that the number of *Sectio Cesarea patients* for the period October to December 2019 was 506 patients.

Various types of efforts are made to overcome pain in post sc wounds, both pharmacologically and non-pharmacologically. Nurses have a role in overcoming pain problems both independently and in collaboration. The nurse's role as a care provider can help overcome pain using non-pharmacological techniques. Some complementary theories may increase comfort patient as example therapy music, relaxation, technique meditation, massage reflection, drug herbs and hypnosis . From the results of a survey conducted at Inpatient Installation A from 7 patients, 5 of them Still sigh painful moment move do mobilization. Non-pharmacological pain management provided by nurses includes relaxation and distraction as well as warm compresses on the area around the wound. Of the 7 patients who did warm compresses, only 2 people and the rest only relied on analgesics and deep breathing relaxation.

Guided Imagery or normal called imagination guided own benefit calm . Therapy *Guided imagery and music* (GIM) was performed with method imagine pleasant incident or place favorite helped with chant music with use five senses , sights , sounds , smells , feeling , produce response positive emotions as a fun distraction For divert attention from something inconvenience or pain (Mustikarani, IK, ZD, & Rakhmawati, nd) . According to (Lamana, A., Pont, A. V, & Amiruddin, 2021) there is influence from technique relaxation *guided imagery* to decline painful *post section cesarean* , that is can make Mother comfortable and quiet with method create imaginary pleasant so that Mother forget or stay away sensation the pain .

From several research that discusses about therapy given to Mother *post section caesarean* For overcome painful writer can conclude that a number of handling nonpharmacological effective influential to intensity painful as well as on research previously Not yet done therapy *guided imagery music* . Based on description background behind above and results study previously so writer interested For do studies research “ Influence Combination Therapy (*Guided Imagery*) against decline

RESEARCH METHODS

Research design is a research plan that refers on type or the type of research chosen to achieve research objectives, as well as acting as a tool and guide to achieve that this goal (Setiadi, 2013) . Research methods used is *quasy experiment* with a purposeful pre test - post test design with control group learn influence between variable independent (Therapy Guided Imagery) with variable dependent (Intensity Painful). On the second group treatment started with *pretest* and after giving treatment held measurement return *posttest* (Nursalam, 2016) . Respondents in this study will be divided into 2 groups, namely the experimental group and the control group. The experimental group was given *guided imagery* . The control group will only be given information about how to deal with pain. The population is all subjects (humans, experimental animals, laboratory data, etc.) that will be studied and meet the specified characteristics. The population in this study were all post- operative caesarean section patients who were in the post-op caesarean section room at Wawa Husada Hospital in the last three months, totaling 560 patients.

The sample in this study was post -caesarean section surgery clients in the post-caesarean section inpatient room at Wawa Husada Kepanjen Hospital. Each group is calculated using the ferderee formula to determine the sample size. Samples obtained from each group is 16. So that from two group obtained results minimum 32 respondents. The inclusion criteria are as follows: Patients with awareness *compos mentis* and cooperative, Patient Post Sectio Caesarea day 2nd , Patient before injection *ketorolac*, Patient experience painful light to moderate, Patient willing become respondents And involved in the research as follows: Patients uncooperative , Patient Which own lesion in feet, Patient own hearing loss , Patient Which No follow Suite study Overall , based on the objectives and sample size criteria, the sampling technique used to meet the sample size is *non-probability sampling* , a type of *purposive sampling* , where the sample is determined by selecting a sample from the population according to the researcher's wishes (problem and research objectives), so that can represent previously known population characteristics (Nursalam, 2016) . The sampling technique for this research was that all patients in the Post Op Sectio Caesarea Room at Wawa Husada Kepanjen Hospital were then adjusted to the research inclusion criteria.

In research This variables used variable free (Independent) and variable bound (dependent) (Nursalam, 2016) . Variable free is stimulus variable or variable that influence variable other . Variable free in study This is therapy *guided imagery*. Variable bound is variable whose variable observed and measured For determine influence caused by variables free . Variable bound from study This is painful Mother *post op sectio caesarean* . Instrument study is tools that will used For possible data collection form questionnaire (question data), form observation , other related forms with data recording and so on (Nursalam, 2016) .

Instrument study This is tool help for researcher in data collection (Nursalam, 2016) . This sheet containing Name , age , education , occupation and history use analgesics , history amount labor . Researcher use tool measure the numeric rating scale (NRS) which contains numbers 0- 10 (from No painful until painful heavy) . Research instruments used in study This form question Which will submitted about

level pain felt by the patient . Researchers filled out a questionnaire according to the intensity scale the pain felt by respondents with a pain scale range of 0-10. The NRS research instrument has good validity and reliability. The validity test of the NRS measuring instrument shows $R < 0.90$ and the reliability test shows a Cronbach's alpha value of 0.95 (Reliable)(Sella, 2019). information on how to deal with pain and providing questionnaires and observation sheets to obtain patient data and *guided imagery SOPs* music as role model researcher in giving *guided imagery music* against *post patient sectio caesarean* .

Analysis univariate in research This is intensity painful Mother *post section caesarean* , with variable before giving *guided imagery music* in groups intervention and after giving *guided imagery music* on group intervention . Analysis bivariate is analysis Which involve ie One variable free and one variable bond is used For know There is or not something connection between variable (Setiadi, 2013) . Analysis This aim For know Influence *guided imagery therapy* to Maternal Pain Intensity *Post Sectio Caesarea*. Before determine type analysis bivariate that will used , then done test normality that is use *Test of Normality Kolmogorof - Smirnov* .Test Data normality using the IBM SPSS statistics 26 program was obtained distributed data language not normal so use Non parametric analysis (*Wilcoxon test,*). Whereas For see difference in mean intensity painful group interventions and groups control done equality test moreover Previously , data was not normally distributed so use analysis *Manwithney* , because to test differences (comparison) Which face to face with 2 group sample pair as well as each – each sample have data at least on an ordinal scale or ratio but No normally distributed (Setiadi, 2013) . Analysis will done with provision Arikunto 1996 in (Setiadi, 2013) , If ($P < \alpha$) then : H_0 is rejected by H_1 which means There is difference average intensity painful before with after intervention in groups control , yes difference average intensity painful before with after intervention in groups experiment and there is difference average intensity painful after intervention in groups control with group experiment. If ($P > \alpha$) then : H_0 is accepted , H_1 is rejected, which means No There is difference average intensity painful before with after intervention in groups control , No There is difference average intensity painful before with after intervention in groups experiment or not There is difference average intensity painful after intervention in groups control with group experiment . its development is experience increase , decrease or even still .

RESEARCH RESULTS AND DISCUSSION

Characteristics Respondent

Characteristics general respondents in research , that is mother post sc in room take care stay A. Characteristics in question consists from characteristics based on age , education and occupation as well as use analgesic with amount post sc mother as many as 32 respondents .

Table . 1 Characteristics respondents

Variable	Category	Treatment Group		Control Group		Total	
		F	%	F	%	f	%
Age	20 - 30 year	8	50%	10	62.5%	18	56.25%
	≥ 31 year	8	50%	6	37.5%	14	43.75%
Total		16	100%	16	100%	32	100%
Education	JUNIOR HIGH SCHOOL	6	37.50%	5	31.25%	11	34.375%
	SMA/SMK	9	56.25%	10	62.50%	19	59.375%
	Bachelor	1	6.25%	1	6.25%	2	6.25%
Total		16	100%	16	100%	32	100%
Work	IRT	12	75%	13	81.25%	25	78.125%
	Teacher	1	6.25%	1	6.25%	2	6.25%
	Employee Private	2	12.5%	1	6.25%	3	9.375%
	Self-employed	1	6.25%	1	6.25%	2	6.25%
Total		16	100%	16	100%	32	100%
Birth History	Primigravida	6	37.50%	6	37.50%	12	37.50%
	Multigravida	10	62.50%	10	62.50%	20	62.50%
Total		16	100 %	16	100%	32	100%

Based on table 4.1 is obtained results that on the group treatment respondents aged 20 – 30 years with total 8 (50%) and ≥31 years with number 8 (50%), education part high school/vocational school with number 9 (56.25%), employment part big Housewife with total 12 (75%) with history birth some multigravidas amounted to 10 (62.50%).

Meanwhile in the group control age respondents part 20 – 30 years old with number 10 (62.5%), education part high school/vocational school with number 10 (62.5%), employment part big Mother House ladder with number 13 (81.25%), with history There were 10 multigravida births (62.5%).

Custom data in study This show distribution frequency results observations made by researchers . The results of the observations in question is results observation intensity painful post sc mother in period 6 hours to do 2 meetings . In research This amount respondents as many as 32 people were divided into 2 groups , namely group control totaling 16 and groups intervention totaling 16. Before done combination therapy *foot massage* and GIM throughout respondents done measurement intensity painful moreover first , after done measurement intensity painful furthermore respondents start guided imagery therapy . After the respondent was given the combination of therapy, the respondent had their pain intensity measured again. Meanwhile, the procedure for the control group was the same as the intervention group, but the difference was that the control group was not given a

combination of therapy.

Table 2 Distribution intensity painful before and after done *guided imagery therapy*

Data	Pre Test		Post Test	
	F	%	f	%
Intensity Painful				
No Pain	0	0	0	0
Painful Light	0	0	13	81.4
Painful Currently	16	100	3	18.6
Painful Heavy	0	0	0	0
Painful Very Heavy	0	0		
Amount	16	100	16	100

Based on table on can explained that from 16 respondents all (100%) intensity painful before given intervention in groups treatment is intensity painful moderate and partial large (81.4%) intensity painful after intervention in groups treatment is intensity painful being in pain light .

Table 3 Distribution intensity painful before and after done *guided imagery therapy* in the group control

Data	Pre Test		Post Test	
	F	%	f	%
Intense Painful				
No pain	0	0	0	0
Painful Light	0	0	0	0
Painful Currently	16	100	16	100
Painful Heavy	0	0	0	0
Very Severe Pain	0	0	0	0
Amount	16	100	16	100

Based on table on can explained that from 16 respondents completely (100%) before intervention in groups control is in intensity painful moderate and complete (100%) in the group control after intervention still is in intensity painful currently .

In research This involving 32 divided respondents into 2 groups namely , 16 respondents in the group intervention and 16 respondents in the group adequate control criteria inclusion . Results data research on groups intervention form results measuring intensity painful Mother *post sc* before and after given guided imagery therapy. In the control group, no combination therapy was given, only monitoring was carried out through observation.

Results Wilcoxon test Intensity Painful Rank - Sum Test

Table 4 Results Test *Wilcoxon Rank-Sum Test* on Group Intervention and Control

Group	N	Min- Max	Mean	Sig (2- tailed) <i>paired t- test</i>
Pre-Intervention group	16	4- 6	5.13	0,000
Post-intervention group	16	1- 4	2.69	
Pre-control group	16	4- 6	5.00	0.564
Post-control group	16	4- 6	4.94	

Based on table 4 show pre group intervention shows a minimum score of 4 (mild pain) and a maximum of 5 (moderate pain). Meanwhile, the mean result for the pre-intervention group showed 5.13 (moderate pain). In the post intervention group, the score was a minimum of 1 (mild pain) and a maximum of 4 (soreness currently). Whereas results mean post group intervention showed 2.69 (mild pain). In both groups, the *Wilcoxon rank-sum test* was carried out , the Sig analysis results were obtained. (2-tailed) = 0.000, which means that there is a significant influence on the intensity of pain before and after the administration of guided imagery therapy on the intensity of *post-sc pain in mothers* .

Meanwhile, in the control group, the pre-control group showed a minimum score of 4 (moderate pain) and a maximum of 6 (moderate pain). Meanwhile, the mean pre-control group results showed 5.00 (moderate pain). In the post the control group showed a minimum score of 4 (moderate pain) and a maximum of 5 (moderate pain), while the mean result in the post control group showed 4.94 (moderate pain). On the second group the *The Wilcoxon rank-sum test* was carried out results Sig analysis . (2-tailed) = 0.564 which means No there is meaningful influence to intensity painful before and after without exists giving guided imagery therapy towards intensity painful Mother *post sc* .

Description of Maternal Pain Intensity Post Sectio Caesarea Before Being Given Guided Imagery Therapy

Based on research in table 4, the results of pain intensity before administration combination *guided imagery* therapy in the group treatment shows a minimum score of 4 (moderate pain) and a maximum of 6 (moderate pain). In the control group, pain intensity showed a minimum value of 4 (moderate pain) and a maximum of 6 (moderate pain).

Based on research data, all 16 treatment respondents (100%) experienced moderate pain intensity, while all 16 control respondents (100%) Also experience intensity painful currently. Results study This is related to research conducted by (Muliani et al., 2019) where the pain felt by clients post caesarean section surgery on the second day was in the range 4 - 6 which was classified as moderate pain. The ability to perceive pain is influenced by several factors and varies between individuals, between other factor physiological Which consists from factor age, fatigue, genetic factors, neurological function and social factors consisting of attention factors, previous experiences, family support and psychological factors consisting of

anxiety factors, and coping patterns, as well as cultural factors. Different perceptions because exists difference age, And experience sectio previous caesarea (Muliani, R., Rumhaeni, A., & Nurlaelasari, 2019) .

According to Nugraheni in (Lamana, A., Pont, A. V, & Amiruddin, 2021) painful post sectio Caesarea is caused by uterine contractions and an incision in the abdomen. The method of delivery using a caesarean section operation is delivery by making an incision in the abdominal wall which causes the discontinuity of the tissue, blood vessels and nerves around the incision to be severed, this stimulates the release of histamine bradykinin and prostaglandins which can cause pain. Someone who carries out SC action is due to several factors including age and parity. According to (Hariawan, H., Tidore, M., & Rahakbauw, 2020) Mother Which finished more from 35 year There is a greater risk of complications during childbirth because the uterine muscle tissue is not good for accept pregnancy. Study in line with study carried out by (Wulandari, S., & Ningsih, 2021) where pain treatment is carried out pharmacologically and non-pharmacologically with the aim of treating the pain by eliminating the symptoms that appear.

Based on identification from researcher to study This It was found that moderate pain intensity was experienced by *post-sc mothers* before being given Gyide therapy imagery on patient post pain surgery *post sc* caused by wound incisions made during the ongoing labor process so that the tissue is severed resulting in pain. The pain that arises is influenced by many things, including age, education and birth history as well as the anxiety felt by the mother. Then there are many ways to overcome it pain both pharmacologically and non-pharmacologically, such as deep breathing relaxation, *guided imagery*, distraction and massage in the field of non-pharmacology. It can be concluded that if a patient gives birth *by caesarean section*, the patient will experience the concept of coping mechanisms in dealing with pain, which can result in the patient's condition becoming anxious. so that the muscles become tension and pain increases.

Description Intensity Painful Ms. *Post Sectio Caesarea* After Given therapy *Guided Imagery Music*

Based on research in table 4, the results of pain intensity after being given guided imagery therapy in the treatment group show a minimum value of 1 (mild pain) and a maximum of 4 (moderate pain). In the control group, pain intensity showed mark minimum 4 (pain medium) and maximum 6 (moderate pain). Based on research data, from 16 treatment respondents, the majority of 13 (81.4%) experienced mild pain intensity, while from 16 control respondents all (100%) experienced moderate pain intensity. The results of this research show that after being given a combination of *guided imagery therapy* , the majority of respondents in the intervention group were at mild pain intensity whereas previously they were at moderate pain intensity .

This is in line with research (Sari, DP, Supardi, S., & Hamranani, 2019) which states that *foot massage* is useful for improving blood flow, relaxing the body, reducing aches and pains and speeding up recovery from pain. This massage is a non-pharmacological therapy that has been proven to be able to reduce pain in post-Caesarean section mothers so that they can feel relaxed and adapt to the pain. Meanwhile, *guided imagery music* can help reduce the pain felt by patients by managing

stress Which caused by taste painful the. When stress can be managed well, the pain felt will decrease by itself (Astuti, ND, & Respati, 2018) .

In the researcher's opinion, the results of research by providing guide imagery therapy can overcome the pain symptoms felt by *post-sc mothers* but do not cure them. Providing guided therapy imagery can be relaxing muscles and relaxes the mind, reduces stress and relieves the pain felt by *post-sc mothers* reduced and distracted. Decline intensity painful after therapy *guided imagery music* in post SC patients . Research result This Enough interesting and can made as one of the intervention nursing in overcome painful post SC patients .

Analysis of the Effect of Guided Imagery Music Therapy on Post Sectio Caesarea Pain Intensity

In both groups, the *Wilcoxon rank-sum test* was carried out, in the treatment group the results of the analysis were Sig. (2-tailed) = 0.000, which means that there was a significant influence on pain intensity before and after exists giving combination therapy *guide imagery* to mother's pain intensity *pot sc*. In the control group, the results obtained were Sig. (2-tailed) = 0.564, which means there was no effect without providing guided imagery therapy. on the intensity of *post-sc maternal pain*. This matter show that with given guided imagery therapy can give influence significant to intensity painful Mother *post sc* .

CONCLUSION

From results study Which done about influence giving therapy *guide imagery* to intensity painful Mother *post sc* can concluded :

1. The pain intensity of *post-sc mothers* in the treatment group and control group before giving guided imagery therapy to *post-sc mothers* had moderate pain intensity.
2. *sc* pain intensity of the treatment group after giving guided imagery therapy to *post-sc mothers* changed to mild pain intensity. Meanwhile in the control group keep the intensity moderate pain .
3. The results of statistical tests show that in the treatment group there was an effect of giving *guided imagery therapy* to *post-sc* mothers when they experienced pain and there was a difference in the intensity of pain after giving therapy. guided imagery in the treatment group and control group.

BIBLIOGRAPHY

- Agustina, N., Anantasari, R., & Nataliswati, T. (2021). Effectiveness of Musical Distraction and Rhythmic Breathing Distraction on Labor Pain in First Stage Mothers in the Maternity Room at Ben Mari Pakisaji Hospital, Malang Regency. *Majapahit Hospital (Majapahit Mojokerto Health Polytechnic Health Scientific Journal)* , 13 (2), 9–19.
- Astuti, ND, & Respati, CA (2018). The Effect of Guided Imagery Therapy on Pain in Post-Operational Fracture Patients in the Bougainvillea Room at Dr. Hospital. R. Koesma Tuban. *Midpro Journal.* , 10 (2), 52–63.
- Hariawan, H., Tidore, M., & Rahakbauw, GZ (2020). Non-Communicable Disease Prevention Behavior in Ambon Adolescents. *Integrated Nursing Journal* , 2 (1), 15–21.

- Ministry of Health, RI (2018). *2018 national riskesdas report*.
- Lamana, A., Pont, A. V., & Amiruddin, S. (2021). The Effect of Guided Imagery and Music Relaxation Techniques on Reducing Post Sectio Caesaria Pain. *Scientific Journal of Maternal and Child Health*, 1 (1).
- Muliani, R., Rumhaeni, A., & Nurlaelasari, D. (2019). *The effect of foot massage on the client's pain level after caesarean section surgery*.
- Mustikarani, IK, ZD, & Rakhmawati, N. (nd). (nd). *Combination of Guided Imagery Music (GIM) and Relaxation*.
- Nursalam, J. (2016). *Nursing Science Research Methodology* . Salemba Medika.
- Sari, DP, Supardi, S., & Hamranani, SST (2019). Effectiveness of Foot Massage and Warm Compresses on Post-Caesarean Section Surgery Pain at Klaten Islamic Hospital. *Journal of Health Sciences* , 14 (1), 1–17.
- Setiadi, N. (2013). *Concepts and practices of nursing research writing* (2nd ed.). Science House.
- Wulandari, S., & Ningsih, N. (2021). *The Effect of Foot Massage Therapy on the Pain Scale of Post-Op Sectio Caesaria Mothers in the ENIM 2 Room at RSMH Palembang*. Sriwijaya University.