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The Effect Of Butterfly Hug on Reducing Anxiety in Pre-Operation Patients at Jatiwinangun Hospital, Purwokerto

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Abstract

Anxiety in patients who are about to undergo surgery is usually related to all kinds of foreign procedures that the patient must undergo and also threats to life safety due to surgical procedures and anesthesia. One of the non-pharmacological therapies is relaxation therapy by administering a Butterfly Hug, which is an intervention to reduce anxiety levels in pre-operative patients. This study aims to determine the effect of administering the Butterfly Hug on reducing anxiety in preoperative patients. This type of research is quasi-experimental with a pretest-posttest control group design. The sample in this research was a purposive sampling of 66 respondents. Data was taken using the HARS anxiety measurement. From this study, the Wilcoxon test results were obtained with a mean difference intervention value of -10.7 (p) 0.001. And the control group with a mean difference value of -3.85 with (p) 0.001. Mann Whitney U test with a mean difference value of -6.00 (-8.93, -3.13) with (p) 0.001. The results of the study showed that there was a difference before and after administering the Butterfly Hug on preoperative patient anxiety at the Jatiwinangun Special Surgery Hospital, Purwokerto. Giving a Butterfly Hug can be a method that can be used for patients who experience anxiety before surgery.

Keywords: *Anxiety, Pre Operation, Butterfly Hug, HARS*

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PENDAHULUAN

Surgery is any treatment action that uses invasive methods by opening or exposing parts of the body, and is generally carried out by making an incision in the part of the body to be treated, then carrying out corrective action and ending with closing and suturing the wound [1] . Surgical procedures are a form of medical therapy that can cause fear, anxiety and even stress, because they can threaten the integrity of the body and soul and can cause pain.

According to *the World Health Organization* (WHO), the number of patients undergoing surgery has increased significantly from year to year. In 2011 there were 148 million people who underwent surgery [2] . Research conducted by Hartoyo (2015), from the National Tabulation Data of the Department of Health of the Republic of Indonesia in 2009, shows that surgical procedures reached 11th place out of the first 50 disease treatment patterns in hospitals throughout Indonesia, with an estimated 32% of patients undergoing surgical procedures.

According to [3] Stuart (2010), there are 2 factors that influence patient anxiety, namely intrinsic factors which include the patient's age , medical treatment,

self-concept and role. Meanwhile, extrinsic factors include medical conditions, level of education, access to information, adaptation process, socio-economic level, and type of action. Management in reducing anxiety with pharmacology, namely, according to Kaplan and Sadock (2019) that the two main types of drugs that should be considered in the treatment of anxiety disorders are anti-anxiety and anti-depressants. Anti-anxiety, including buspirone and benzodiazepines, while anti-depressants include the Serotonin Norepinephrine Reuptake Inhibitors (SNRI) group. Meanwhile, non-pharmacological management of reducing anxiety can be done by providing music therapy, dhikr therapy, and *Butterfly Hug* .

Butterfly Hug is a method of hugging yourself to relieve stress or anxiety and become more relaxed and calm. *Butterfly hug* is also a method of direct bilateral stimulation (such as eye movements or pressure) which is done by crossing your arms over your chest and then clapping your hands together like a butterfly's wings flapping. Do this while inhaling slowly and exhaling slowly. This *butterfly hug* method can be done by all age categories and anywhere [4] .

The aim of the research is to determine the influence *of butterfly hug* against decline _ Anxiety in pre - operative patients in hospitals jatiwinangun purwokerto .

METODE

This research is a *quasi-experimental* research with a *pretest-posttest control group design* . The sample involved was 66 respondents from elective surgery patients using a *purposive technique sampling* . With the inclusion criteria of adult patients aged 1 8-60 years , patients with physical status ASA 1 and ASA 2 , elective surgery and the exclusion criteria of patients refusing to be respondents, indications for admission to the ICU . This research instrument uses the HARS questionnaire and observation sheet. Data analysis uses bivariate. No. B. LPPM-UHB/2036/07/2023.

HASIL DAN PEMBAHASAN

Table 1. Characteristics of Respondents

El variable	*Butterfly Hugs* (n=33)	Control (n=33)
	f (%)	f (%)
Age		
Late Teenagers 18-25	6 (18.2)	4 (12.1)
years old	10 (30.2)	14 (42.4)
Early adulthood 26-35	2 (6,1)	3 (9,1)
years old	13 (39.4)	10 (30.3)
Late adults 36-45 years old	2 (6,1)	2 (6,1)
Early seniors 46-55 years old		
Elderly late 60 years		
Gender		
Man	16 (48.5)	17 (51.5)
Woman	17 (51.5)	16 (48.5)

Level of education		
elementary school	2 (6,1)	1 (3.0)
JUNIOR HIGH SCHOOL	3 (9,1)	5 (15.2)
SENIOR HIGH SCHOOL College	20 (60.6) 8 (24.2)	16 (48.5) 11 (33.3)
ASA		
ASA 1	18 (54.5)	18 (54.5)
ASA 2	15 (45.5)	15 (45.5)
Type of operation		
Small	11 (33.3)	12 (36.4)
Currently	22 (66.7)	21 (63.6)
Operation history		
Once	9 (27.3)	10 (30.3)
Never	24 (72.7)	23 (69.7)
Total	33 (100.0)	33 (100.0)

Characteristics of respondents in this study include age, type gender, education level, ASA status, type of surgery, and surgical history. Based on t a b e l 1 provides information b a hwa the majority r e spon d e n E a r l y elderly age (46 - 55 years), namely 13 respondents (39.4) in the intervention group who received the *Butterfly Hug* , and early adulthood (26 - 35 years), namely 14 respondents (42.4) in the control group. . The majority were 17 respondents (51.5) female, and 17 respondents (51.5) male . The majority of education levels are most dominant in high school, namely 20 (60.6) and 16 (48.5). The majority of respondents' ASA status was at ASA 1 as many as 18 respondents (54.5%). The majority had a history of surgery, the most dominant being moderate surgery, namely 22 (66.7) and 21 (63.6). The majority of patients' surgical history had at most never experienced previous surgery, namely 24 (72.7) and 23 (69.7).

According to researchers, it is mostly young people who often experience anxiety, because young people often experience stress because their individual coping is not good. According to research by Putri *et al* . (2022) stated that age is a factor that influences preoperative anxiety because every year an increase in age reduces the possibility of preoperative anxiety by five percent. Individual maturity will influence a person's ability to cope with mechanisms, making it difficult for them to experience anxiety because they have a greater ability to adapt [to] anxiety than those of less mature age.

Based on gender characteristics This is in line with research by Mawaddah *et al* . (2020) that women are more easily influenced by pressures from their environment and accept their feelings more sensitively, while men are more active, reactive and explorative in dealing with problems, especially anxiety before undergoing surgery [6] .

Based on the characteristics of the respondents' level of education , the most dominant level of education is high school, namely 20 (60.6) and 16 (48.5). According to researchers, the higher a person's education, the easier it is for a person

to receive information so that the more knowledge the patient has. Having good education will change the patient's attitudes and behavior in an effort to mature themselves. This is in accordance with Sahliana (2021) that the level of education of a person or individual will also influence the ability to think, the higher the level of education, the easier it will be to think and capture new information, including explaining new problems [7] .

Based on the characteristics of the respondents, it can be seen that the most dominant ASA status is ASA 1, namely 18 respondents (54.5). This means that you have a mild systemic disease, so proper preoperative care is needed, especially for preoperative anxiety problems. This is in accordance with research by Kumar *et al* . (2019), according to him, the higher the patient's ASA physical status, the higher the anxiety experienced by the patient.

Based on the characteristics of the respondents, it can be seen that the most common type of surgery is moderate surgery, namely 22 (66.7) and 21 (63.6). Factors that influence the level of anxiety in preoperative patients are potential stressors, maturity, low educational and economic status, physical condition, social culture, environment and situation, age, and type of operation (Hatimah et al, 2022 *)* . Regarding the types of minor and major surgery, it also has an impact on pre-operative patients due to the perception of fear of the surgery they are undergoing.

Based on the characteristics of the respondents, it can be seen that the majority of patients' surgical history had never experienced surgery before, namely 24 (72.7) and 23 (69.7) respondents. According to researchers, the patient's initial experience in surgery is a very valuable experience that occurs for the individual, especially for the future. This is in line with research by Sugiartha *et al* . (2021) that previous surgical experience is one of the important things that can influence anxiety [9] .

Table 2. Anxiety Level

Anxiety Level	*Butterfly hug*			
	Intervention		Control	
	Pre	Post	Pre	Post
	f(%)	f(%)	f(%)	f(%)
No anxiety	0	0	0	0
Light Packaging	0	0	0	10 (30.3)
Moderate Anxiety	13 (39.4)	15 (45.5)	14 (42.4)	13 (39.4)
Severe Anxiety	20 (60.6)	18 (54.5)	17 (51.5)	10 (30.3)
Very serious anxiety	0	0	2 (6.1)	0
Total	33(100.0)	33(100.0)	33(100.0)	33(100.0)

Based on Table 4.2, it illustrates that the level of anxiety before (*pretest*) Given *the Butterfly Hug* in the intervention group, 13 respondents (39.4) experienced moderate anxiety, and 20 respondents (60.6) experienced severe anxiety , in the control group 14 respondents (42.4) experienced moderate anxiety, 17 respondents (51.5) experienced severe anxiety, and 2 respondents (6.1)

The results of this study show the severe anxiety felt by respondents, such as: worry, restlessness, shortness of breath, cold hands, pounding heart, unable to rest or sleep peacefully, irritability and irritability. This is in accordance with

research by Nugroho *et al* . (2021) that severe anxiety greatly reduces a person's perception. Individuals tend to think only about small things and ignore other things [10] . This is in accordance with the research results of Asriawal *et al* . (2021) that severe anxiety individuals can no longer think hard and need a lot of direction is characterized by: very reduced perception, very easy to shift attention, unable to understand the current situation, communication is difficult to understand, hyperventilation, tachycardia, headaches, dizziness and nausea.

The anxiety experienced by patients before surgery has various reasons, including: anxiety about facing the operating room and operating equipment, anxiety about *body image* in the form of body defects, anxiety and fear of dying during anesthesia, anxiety if the operation fails, and anxiety because of costs. which swells [11] . Researchers believe that patients who will undergo surgery experience different levels of anxiety, ranging from mild anxiety to severe anxiety.

Table 3. Wilxocon test

Group	*Butterfly Hugs* (n=33) *Mean* ± SD	p-value	*Mean difference (95% Confidence Interval)*	*Cohens'd (effect size)*
Pre *Butterfly Hug*	31.2±6.33	0.001	-10.7 (-13.3,-8.08)	-2.04
Post *Butterfly Hug*	20.5±3.83			
Pre Control	30.4±7.83	0.044	-3.85 (-7.59, -0.11)	-0.50
Post Control	26.6±7.36			

Based on table 3, the results of the Wilcoxon test in the intervention group with the provision of the Butterfly Hug showed a p-value of 0.001 (p-value <0.05), meaning that there was an effect before and after being given the Butterfly Hug on reducing pre-operative patient anxiety at the Jatiwinangun Special Surgery Hospital. Purwokerto. The results of this research are in line with research conducted by Girianto et al. (2021) whose results prove that in the experimental group given Butterfly Hug therapy there was a significant reduction in anxiety levels with post-test results showing that half of the respondents (50.0%) experienced moderate anxiety and half of the respondents (50.0%) experienced mild anxiety. The p-value is 0.003 (p-value <0.05), meaning that there is an influence of Butterfly Hug on anxiety levels [12] .

Based on table 3, the results of *the Wilcoxon* test in the control group showed a p-value of *0.044* (p- *value* <0.05), meaning that there was an effect before and after being given *the Butterfly Hug* on reducing preoperative patient anxiety at the Jatiwinangun Special Surgical Hospital, Purwokerto. The control group in this study underwent therapeutic communication in accordance with the Standard Operating Procedures (SOP) of the Jatiwinangun Special Surgical Hospital, Purwokerto. From the results of statistical tests, it was found that there was a significant difference between anxiety before and after with respondents experiencing a decrease in anxiety levels in the low value range. The reduction in anxiety levels was due to adaptation to room conditions and hospital conditions in general due to therapeutic communication from health workers at the Jatiwinangun Special Surgical Hospital, Purwokerto, so that anxiety arising from hospitalization could be reduced. This is because there is no preoperative intervention related to

reducing anxiety levels. According to the theory of Caturini *et al* . (2023) that one way to reduce preoperative patient anxiety levels is to provide *a Butterfly Hug* [13] .

Table. 4 Maan Whitney U Test

Group	*Butterfly Hugs* (n=33) Mean±SD	controls (n=33) Mean±SD	*Mean difference (95% Confidence Interval)*	P-value	r_{rb}
Post *Butterfly Hug*	20.5±3.83	26.6±7.36	-6.00 (-8.93,-3.13)	0.001	-1.03
Post Control					

Mann Whitney U test can be concluded that there is a difference between the provision of *butterfly hugs* and the control group in reducing pre-operative patient anxiety at the Special Surgical Hospital. Jatiwinangun Purwokerto with a p- *value of* 0.001 (p- *value* <0.05) . The results of this research are in line with research by Aindaya (2020) that there is a decrease in the percentage of patient anxiety from *pre* and *post values* for moderate anxiety by 8%.

Similar research was conducted which showed that there was a significant effect of providing *self-healing intervention* using the *Butterfly Hug technique* on the anxiety of pre-caesarean *section patients* at Ibu Fatmawati Soekarno Hospital, Surakarta with a p-value of *0.016* (p- *value* <0.05).

Butterfly Hug is a therapy method that involves giving yourself advice to feel better. The *Butterfly Hug* method has also been proven to increase oxygen levels in the blood and can make us calmer. Not only that, *the Butterfly Hug* is also known to be effective in healing negative and traumatic feelings [14] . *Butterfly Hug* is a method of bilateral stimulation such as eye movements or tapping to reprocess traumatic events for individuals or groups to calm themselves [15] . Good calming techniques can reduce anxiety. According to Lazzaroni *et al* . (2021) one of the benefits of *the Butterfly Hug* is to calm the mind and relax the body, so that feelings of anxiety and worry and stress can be reduced [16] .

KESIMPULAN

Research shows that butterflies have an effect on reducing anxiety in pre-operative patients.

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