

RELATIONSHIP BETWEEN SELF-EFFICACY AND ANXIETY LEVEL IN PRE OPERATIVE CATARACT PATIENT AT BALUNG HOSPITAL JEMBER

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ABSTRACT

Keywords:

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Surgery caused health problems that is anxiety, factors that influence anxiety is self-efficacy. Self-efficacy will increase human achievement in taking actions, reduce stress and depression. This study aimed to analyze the relationship between self-efficacy and anxiety levels in pre-operative cataract patient at Balung Hospital Jember. This study used cross sectional approach, samples in this study were 63 and obtained with purposive sampling. This study consisted of 2 variables, the independent variable of the study was self-efficacy and the dependent variable was the level of anxiety. Data collection used a pre-operative self-efficacy scale (PSES) to assess self efficacy and the Amsterdam pre-operative anxiety and information scale to determine the level of patient anxiety. Analysis the relationship self-efficacy with anxiety levels using the Spearman rank test with p value <0.05. The results showed median was 146.00, percentage of self-efficacy was 53 (84.1%) respondents had good self efficacy and 10 (15.9%) had poor self-efficacy, percentage of patient anxiety was 39 (61.9%) respondents have mild anxiety levels. There was a significant correlation between self-efficacy and anxiety level (p=0.001 r= 0.691) with negative correlation which means the higher self-efficacy, the lower anxiety level. Self-efficacy associated with anxiety in patients with cataract surgery because self-efficacy plays an important role in controlling anxiety. Someone who has high trust and believes will be able to control what happens so they will have low anxiety level.

BACKGROUND

Cataract is the condition where there is clouding in eye lens that may lead to visibility decrease and blindness (Depkes, 2014). Blindness may be prevented by performing surgery, although it may cause health problem in the form of mental emotional aspect, that is, anxiety (Ramirez et al, 2017; Tahmassian & Moghadam, 2011). Anxiety is a normal reaction when a surgery is nearing to take place (Ramirez, 2017). However, if the high level of anxiety is not properly taken care of, it may affect the physiological and psychological condition of the patient (Bedaso & Ayalew, 2019). Bandura stated that one of the factors that affect anxiety is the self efficacy which determine how an individual thinks, motivates himself, as well as acts in order that self efficacy becomes

strong and leads to the improvement of a human's act as well as the decrease of the stress and depression risk (Bandura, 2007).

The data taken from Ministry of Health demonstrates that 1 million Indonesians experience blindness caused by cataract. The result of the rapid assessment of avoidable blindness (RAAB) survey reveals that the blindness rate in Indonesia reaches 3% found at the age of over 50 years (Ministry of Health, 2018). The prevalence of blindness in 2017, in East Java reaches 41 thousand cases (2.9%) (Putri, 2018). In Jember region, the prevalence of cataract in Balung Regional Hospital is found as many as 568 cases as cited from the literature study (Havivah, Siswoyo, & Sutawardana, 2019).

Cataract surgery is efficient to lower the risk of blindness. However, there are so many cataract

patients who have not taken surgery due to the fear of surgery procedure (8.1%) (Infodantin, 2014). The patients who gets anxious prior to surgery may experience increased stress through the activation release of neuroendocrine (Ekinici et al, 2017). The patients who gets anxious prior to surgery may experience increased stress through the activation release of neuroendocrine (Ekinici et al, 2017) which affects patient's blood pressure so as to influence episcleral pressure that is vital in controlling the flow of aqueous humor in passing through the trabecular meshwork to the schlemm canal. This allows intraocular pressure (IOP) to increase (Klein et al, 2005). The increase of IOP may impose the difficulty in the lens implant and increase the complication risk that may harm the vision like retinal occlusion of the blood vessel, progressive loss of visual field and neuropathy optic (Parnanda, 2017). Anxiety is affected by self efficacy. When a person's self efficacy is high, his level of anxiety is low. In contrast, when a person's self efficacy is low, he will doubt his ability and tend to avoid hard actions that are taken as thread. This type of person has low motivation and commitment in regaining health (Tahmassian & Moghadam, 2011).

The attempt of lowering the level of anxiety is done by improving self efficacy which can be done by replicating other people's success as the benchmark of patients survivability, as well as to encourage the patients verbally (done by closest persons) in convincing him to perform a task, and to provide the condition where someone who has not experience anxiety to be informed about the actions taken regarding cataract (Prahara & Budiyan, 2018).

METHODS

This research was a quantitative which employs descriptive analytical design by using cross sectional approach. The population of this research was the pre-cataract operation patients at Balung Hospital Jember Regency. The sampling of this research was collection technique used in this research was purposive sampling. As many as 63 samples taken from those individuals who were planned to undergo first-time cataract surgery. The instrument of this research was used in this research was the pre-operative self-efficacy scale (PSES) to assess self efficacy and the Amsterdam preoperative anxiety and information scale (APAIS) to determine the level of anxiety. The analysis of the correlation between self efficacy and the level of anxiety was conducted by using the Spearman rank correlation. Ethic committee approval no. 623/UN25.8/KEPK/DL/2019.

RESULTS

Age

According to the table 1 the average age of respondent was 59.92 years old with a minimum age of 36 and a maximum age of 84.

Gender, Marital Status, Recent Education and Employment

Table 2 shows that most respondents were female as many as 34 respondents (54%), the most recent education was elementary school 52 respondents (82.5%), and the type of respondent's occupation was farmer 28 respondents (44.4%).

According to the table 3 shows the average value of respondents self-efficacy is 131.48.

In table 4 shows that most respondents have good self-efficacy 53 respondents (84.1%).

Table 5 shows the level of anxiety of 39 respondents (61.9%) had mild anxiety levels.

Table 6 shows Spearman rank correlation test obtained p value 0.001 with a correlation value (r) = -0.691 alpha value (α = 0.05) then the result obtained p value < alpha so that alternative hypotheses are accepted which means there is a relationship between self-efficacy and anxiety levels in pre-operative cataract patient at Balung Hospital Jember. in pre-operative cataract patient at Balung Hospital Jember. The value (r) = -0.691 with negative correlation which means if the patient has a good self-efficacy, the anxiety level will be lower.

DISCUSSION

Age

Getting older causes protein in the eye lens clumping so the eye lens become no more elastic, not clear, and causes the light cannot enter through the pupils of the eye (Hutauruk, 2017). Researchers argue that getting older will making our organ body's function become weak including eye function so we are more at risk of developing cataracts.

Gender

The amount of the estrogen in women will decrease with age and the reduction in estrogen levels influences the cataracts because estrogen is protective (Zetterberg, 2014). Gender is not a major risk factor for cataract because the incidence of cataracts continues to increase with age both in men and women. Researchers argue the difference in results with other studies is in the time to collecting data and research locations (Zhangs, 2003).

Table 1. Distribution of Respondents by Age in Pre-Operative Cataract Patient

Variable	Mean	SD	Min-Max	Normality test
Age	59.92	93.945	36-84	0.2

Table 2. Distribution of Respondents by Gender, Marital Status, Latest Education, and Employment in Pre-Operative Cataract Patient

Variable	Frequency	Percentage
Gender:		
Female	34	54
Male	29	46
Marital status:		
Single	0	0
Married	51	81
Widow/widower	12	19
Latest education:		
Elementary school	52	82.5
Junior high school	7	11.1
Senior high school	3	4.8
College	1	1.6
Employment:		
Unemployment	16	25.4
Entrepreneur	3	4.8
Labor	9	14.3
Farmers	28	44.4
Civil servant	2	3.2
Others (fisherman, shopkeepers, employes)	5	7.9

Table 3. Self-Efficacy Score in Pre-Operative Cataract Patient

Variable	Median	Mean	SD	Min-max	Normality test
Self-Efficacy	146.00	131.48	40.379	25-175	0.001

Table 4. Self-Efficacy Percentage in Pre-Operative Cataract Patient

Variable	Frequency	Percentage
Self-Efficacy:		
Good	53	84.1
Bad	10	15.9

Education Level

The level of education has an impact on the presence or absence of understanding and awareness of cataracts. Individuals who have a high level of education tend to have greater attention in health,

individuals will have a good attitude towards health services. Researchers argue that the level of education affects the development of cataracts due to the lack of health information obtained by respondents and the lack of health awareness (Alimaw, 2019).

Table 5. Percentage of Anxiety Level in Pre-Operative Cataract Patient

Variable	Frequency	Percentage
Anxiety Level:		
Mild anxiety	39	61.9
Moderate anxiety	14	22.2
Severe anxiety	10	15.9

Table 6. Data Analysis of the Relationship between Self-Efficacy and Anxiety Level in Pre-Operative Cataract Patient

Variable	P-Value	R
Self-Efficacy	0.001	-0.691
Anxiety level		

Employment

Based on research at case Western Reserve University in Clevealan, work outside the building is more at risk of suffering cataracts because exposure from ultraviolet rays can damage lens proteins called glycation that are usually seen in cataracts. Ultraviolet rays can trigger dangerous oxidative reactions to the lens (National Eye Institute, 2014). Researchers argue that farmers are one of the jobs outside the building so their will be more often exposed to sunlight. Moreover, the lack of using personal protective equipment such as hats and glasses causes the eyes will be exposed directly with sunlight without any barrier so it will increasing the risk of cataracts.

Self-Efficacy

According Nolla J. Pender's theory about the concept of health promotion model (HPM) self-efficacy influences the assessment of personal ability to regulate and carry out someone's behavior so their commitment to taking action will increase. Good self-efficacy will reduce barriers of their behavior so the goals of behavior change can be achieved. In this case the researcher believes that if the individual believes the surgery will succeed, they will have confidence about the possibility of the results to be achieved and what they can do after the surgery.

Anxiety Level

Anxiety in surgical procedures is a normal reaction, but if the patient have a severe anxiety level and not treated immediately it will affect the patient's physiological and psychological conditions (Bedaso & Ayalew, 2019). In this study, most patients have mild anxiety levels. Researchers believe that patients who have mild anxiety levels will have a high desire to achieve recovery so they can beat their fear of

surgery.

Relationship between Self-Efficacy in Pre-Operative Cataract Patient

Anxiety level in patients with cataract surgery can cause discomfort and increase blood pressure, so that will make surgery to be canceled (Sari et al., 2018). Anxiety is influenced by self-efficacy. Efficacy plays an important role in anxiety control. High self-efficacy helps individuals motivate themselves to deal with stressors which is it will affect their quality of life. Researchers argue if this theory is same as the results of the study that respondents who have mild anxiety level said they want to recover quickly so they have self-efficacy or good confidence in taking action that must be done after surgery to achieve optimal recovery (Chen, 2017).

CONCLUSION

The value of the respondent's self-efficacy variable obtained a median value 146.00 with an average 131.48 and most of them had good self-efficacy 53 respondents (84.1%), with a minimum value 25 and a maximum value 175. The highest level of patient anxiety was at mild anxiety level with 39 people (61.9%). There is a significant relationship between self-efficacy with anxiety levels in pre-operative cataract patient at Balung Hospital Jember with p value 0,001 (r) -0,691, it means patient who have a good self-efficacy score they will have mild anxiety level. The strength of the relationship is strong. The next researcher is expected to be able to find more effective measurement tools for measure the patient's self-efficacy so that will make it easier for respondents to fill in and be able to look for other characteristics such as those that can affect self-ef-

ficacy such as the experience of success, the experience of others, and social persuasion of the patient so they can find out efforts to improve self-efficacy of pre-operative cataract patient.

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