FACTORS AFFECTING ANXIETY LEVELS IN PRE-CATARACT SURGERY PATIENTS

Dwi Cahyono [1], Tata Mahyuvi [2]

[1,2]Bhakti Mulia Hospital Jakarta, Indonesia
[1,2]Student Doctoral at Institute Of Health STRADA Indonesia, Indonesia
Jl. Manila No. 37 Tosaren, Kediri, Jawa Timur, 64123
Email: dwicahyono.ns@gmail.com

Abstract

Surgery is an experience that can cause anxiety. Anxiety arises as a result of an individual's psychological reactions, and excessive internal and external stimuli or stimuli have an impact on the inability to handle it. Perioperative anxiety in cataract surgery affects the majority of patients, fear of death dominates the patient's concern regardless of whether the patient underwent surgery. The aim of this study was to analyze the relationship between characteristics (age, gender, education, and experience) with the level of anxiety of patients undergoing surgical procedures cataract at Bhakti Mulia Hospital Jakarta. The research method used was descriptive correlational analytic with a cross-sectional approach. The number of samples was 72 respondents with a non-probability sampling technique, namely quota sampling. The statistical test used was the Spearman Rank. The results showed that there was a significant correlation of 0.006 with a closeness level of 0.320 between age and anxiety level. There is a significant relationship of 0.000 with a closeness level of -478 between the level of education and the level of anxiety. There is a significant relationship of 0.000 with a closeness level of 0.513 between experience and anxiety levels. Meanwhile, gender characteristics do not show a significant relationship with the level of anxiety with a p-value of 0.515, a closeness level of -0.078. 000 with a closeness level of -478 between the level of education and the level of anxiety. There is a significant relationship of 0.000 with a closeness level of 0.513 between experience and anxiety levels. Meanwhile, gender characteristics do not show a significant relationship with the level of anxiety with a p-value of 0.515, a closeness level of -0.078. 000 with a closeness level of -478 between the level of education and the level of anxiety. There is a significant relationship of 0.000 with a closeness level of 0.513 between experience and anxiety levels. Meanwhile, gender characteristics do not show a significant relationship with the level of anxiety with a p-value of 0.515, a closeness level of -0.078.

Keywords: anxiety level, cataract, pre surgery patient

BACKGROUNDS

Cataracts are an important problem that needs to be treated early and optimally. The eye has an important role in life so that if it is not treated immediately it can interfere with human life activities, this will certainly have an impact on the quality of human life. Diseases of the eye are classified into several groups, cataracts are one of the diseases that cause blindness that occurs throughout the world. Cataracts are a condition when the eyes that initially appear clear turn cloudy(Ilyas, 2017).

Surgery or surgery is the only treatment for cataracts (Gupta et al., 2014). Surgical methods for cataracts can be performed using Intracapsular Cataract Extraction (ICCE), Extracapsular Cataract Extraction (ECCE), Small Incision Cataract Surgery (SICS), and Phacoemulsification techniques (Mutiarasari & Handayani, 2011). The surgical procedure in this operation does not require a long time, but only a few minutes, but it can trigger stress for some people, causing anxiety. Preoperative anxiety must be addressed immediately because it can hinder the operation and will have an impact on the course of the operation (Muttaqin, 2020).

A study shows that the prevalence of cataracts is generally caused by aging, namely the age of 65-74 years by 50%. The number of this prevalence increases at the age of over 75 years (Eva & Augsburger, 2019). The estimated number of people with visual impairments worldwide in 2010 was 285 million people, 39 million or 14% of the population suffer from blindness and 246 million people or 86% of the population have decreased vision. There are at least 135 million people who experience significant visual disabilities and there are more than 50 million blind people worldwide today, with the most common cause of blindness being cataracts (51%) followed by glaucoma and Age related Macular Degeneration (AMD) (Riskesdas, 2018).

Indonesia as a developing country has many eye health problems. It is estimated that the incidence of cataracts is 0.1% per year or there is a new cataract patient among 1000 people each year. The tendency of the Indonesian population to suffer from cataracts is 15 years faster than residents living in sub-tropical regions, cataract patients who are operated on are aged under 55 years around 16-22% (Riskesdas, 2018). The national blindness rate is 3,099,346 and is 0.4 percent less than the 2007 blindness rate (0.9%). The prevalence of cataracts in Indonesia according to the results of enumerator officers in the 2013 Riskesdas was highest in North Sulawesi (3.7%) followed by Jambi (2.8%) and Bali (2.7%) then the lowest in DKI Jakarta was at (0, 9%)(Riskesdas, 2013). Many attempts have been made to prevent or slow down the progression of cataracts. Currently available treatment to prevent blindness is cataract lens surgical extraction(Gupta et al, 2014). Success in surgery or surgery to be able to restore vision can reach 95% of clients (Smeltzer & Bare, 2014)

Surgery is a treatment effort that require.s invasive methods or actions to open and show the organ or part of the body to be operated on. Surgery is carried out by making an incision in a part of the body then it will be repaired and ended with suturing the wound at the end. Surgery is an experience that can cause anxiety. Anxiety arises due to individual psychological reactions, as well as excessive internal and external stimuli or stimuli impacting the inability to handle it(Siswoyo, 2016). Anxiety is an emotional state and has no specific object and this situation is experienced subjectively (Stuart, 2014). Anxiety is a condition in which feelings of discomfort and restlessness are accompanied by individual autonomic responses and feelings of worry caused by anticipation of danger or threat (Wilkinson & Ahern, 2019)

Perioperative anxiety in cataract surgery affects the majority of patients, fear of death dominates the patient's worries regardless of whether the patient underwent major or minor surgery(Ramirez & Brodie, 2017). Before surgery the patient is usually worried about the success of the type of surgery and the side effects of anesthesia, intraoperative and postoperative pain (Singh et al., 2015). Anxiety felt by every patient is a natural thing, but excessive anxiety can cause pathophysiological responses such as tachycardia, increased blood pressure, decreased ability to tolerate pain both intra and post surgery. Other factors that can affect preoperative anxiety are the type of surgery, duration of surgery, patient's knowledge of disease and surgery, duration of stay in hospital, and type of anesthesia used (Singh et al., 2015). Increased blood pressure on the client will result in increased intraocular pressure (IOP) also (Yudaniayanti et al., 2012)an increased IOP will make it difficult for doctors to implant an intraocular lens as a replacement for a lens with cataracts (Budiman et al., 2013). Someone who has a history of high blood sugar will cause the lens of the eye to stick to the posterior capsule so that it takes a long time to remove the cataract and requires a special technique. In addition, the posterior capsule of the lens is increasingly fragile so that it breaks easily and vitreous fluid prolapse will occur. This will make it difficult to implant the ocular lens and even possibly cannot be implanted, thus making sharp vision after surgery unable to be maximized (Budiman et al., 2013).

Several studies have been conducted by previous researchers regarding the level of anxiety in patients with pre-cataract surgery. Study (Havivah, 2019)as a result, most of the patients experienced moderate anxiety as many as 59 people (62.1%), mild anxiety as many as 21 people (22.1%) and severe anxiety as many as 15 people (15.8%). Meanwhile in research (Syafei & Suryadi, 2018) get 28 (50.0%) respondents experiencing severe anxiety and 28 (50.0%) respondents experiencing very severe anxiety. From existing research, it turns out that there is still a high level of anxiety in patients with pre-cataract surgery. Also, after the researchers made observations in the pre-medication room at Bhakti Mulia Jakarta Hospital, patients who were going to undergo cataract surgery showed anxious expressions so that researchers would conduct research on the factors that influence anxiety levels in pre-cataract surgery patients at the hospital.

RESEARCH METHODS

The design of this research is correlational analytical descriptive. independent variables include factors that affect the level of anxiety: namely age, gender, education, experience. the dependent variable includes the level of anxiety: mild, moderate, severe. Anxiety measurement tool using the Amsterdam Preoperative Anxiety and Information Scale (APAIS) questionnaire. The number of samples is 72 respondents with the inclusion criteria of respondents who are aware and can communicate well, respondents with senile cataracts and aged ≥ 45 years. Data collection was carried out at Bhakti Mulia Hospital Jakarta in September - October 2020.

RESEARCH RESULTS

Table 1. Frequency Distribution of Respondents by Age

Variable	Frequency	Percentage
45-55 years	28	38.9 %
56-65 years	27	37.5 %
> 65 years	17	23.6 %
Total	72	100 %

Table 1 above shows that of the 72 respondents the highest frequency of respondents was in the age range of 45-55 years as many as 28 people (38.9%), and the age56-65 yearsas many as 27 people (37.5%) and aged> 65 years as many as 17 people (23.6%).

Table 2. Frequency Distribution of Respondents by Gender

Variable	Frequency	Percentage
Man	31	43.1%
Woman	41	56.9%
Total	72	100.0%

Table 2 above shows that of the 72 respondents, there were 41 female respondents (56.9%) and 31 male respondents (43.1%).

Table 3 Frequency Distribution of Respondents by Education Level

Variable	Frequency	Percentage
Elementary School	19	26.4 %
Junior High School	20	27.8 %
Senior High School	23	31.9 %
College	10	13.9 %
Total	72	100 %

Table 3 above shows that of the 72 respondents the highest frequency of respondents had high school education/equivalent as many as 23 people (31.9%), and junior high school/equivalent education as many as 20 people (27.8%), and a small portion of tertiary education as many as 10 people (13, 9%).

Table 4. Frequency Distribution of Respondents Based on Experience

Variable	Frequency	Percentage
0 Times	42	58.3%
1 time	30	41.7%
Total	72	100%

Table 4 above shows that of the 72 respondents the most frequency of respondents had never undergone cataract surgery, namely 42 people (58.3%), and those who had experience of undergoing cataract surgery, namely as many as 30 people (41.7%).

Table 5. Frequency Distribution of Respondents Based on Patient's Anxiety Level

Variable	Frequency	Percentage
Severe Anxiety	5	6.9%
Moderate anxiety	43	59.7%
Mild anxiety	24	33.3%
Total	72	100%

From table 5 above it can be seen that of the 72 respondents the most frequency of respondents experienced moderate anxiety, namely as many as 43 people (59.7%), and only a small number of respondents experienced severe anxiety, namely as many as 5 people (6.9%).

Table 6 . Relationship between Age and Anxiety Level of Patients Who Will Undergo Cataract Surgery

Age	Anxiety Level				Correlation coefficient	P Value
	Heavy	Currently	Light	Total		
	N (%)	N (%)	N (%)	N (%)		
45-55	2 (2.8%)	21 (29.2%)	5 (6.9%)	28 (38.9%)		
56-65	2 (2.8%)	17 (23.6%)	8 (11.1%)	27 (37.5%)	0.320	0.006
> 65	1 (1.4%)	5 (6.9%)	11 (15.3%)	17 (23.6%)		
total	5 (6.9%)	43 (59.7%)	24 (33.3%)	72(100.0%)		

In Table 6. it can be seen that the highest frequency of respondents experienced moderate anxiety and was in the age range of 45 -55 years as many as 21 people(29.2%),aged 56-65 years as many as 17 people(23.6%). There is 1 respondent(1.4%)>65 years of age who have severe anxiety.The results of the statistical analysis showed that there was a significant relationship between age and the anxiety level of pre-cataract surgery patients in the pre-medication room at Bhakti Mulia Hospital, with a p-value of 0.006 where the p-value was <0.05, and a moderate level of closeness with a correlation coefficient of 0.320.

Table 7. Relationship between Gender and Anxiety Level of Patients Who Will Undergo Cataract Surgery

Gender	Anxiety Level				Correlation coefficient	P Value
	Heavy	Currently	Light	Total		
	N (%)	N (%)	N (%)	N (%)		
Man	1 (1.4%)	19 (26.4%)	11 (15.3%)	31 (43.1%)		
Woman	4 (5.6%)	24 (33.3%)	13 (18.1%)	41 (56.9%)	-0.078	0.515
Total	5 (6.9%)	43 (59.7%)	24 (33.3%)	72 (100.0%)		

In Table 7. it can be seen that the highest frequency of female respondents experiencing moderate anxiety was 24 people(33.3%), as many as 19 male respondents(26.4%). There is 1 male respondent(1.4%)who have severe anxiety. Based on the probability of the Spearman rank test data, it can be seen in the column p value = 0.515 or probability below (α = 0.05), thus the p value is greater than alpha so that Ho is accepted. So it can be concluded that there is no relationship between gender and the anxiety level of pre-cataract surgery patients in the Pre-Medication Room of the Hospital. Bhakti Mulia and Spearman rank test data show r = - 0.078 (r. = 0.00 - 0.199) so the level of closeness is very low.

Table 8. The Relationship between Education and the Anxiety Level of Patients Who Will Undergo Cataract Surgery

Education	Anxiety Level				Correlation coefficient	P Value
	Heavy	Currently	Light	Total		
	N (%)	N (%)	N (%)	N (%)		
Elementary School	1 (1.4%)	5 (6.9%)	13 (18.1%)	19 (26.4%)		
Junior High School	0 (0.0%)	13 (18.1%)	7 (9.7%)	20 (27.8%)	-0.478	.000
Senior High School	3 (4.2%)	16 (22.2%)	4 (5.6%)	23 (31.9%)		
College	1 (1.4%)	9 (12.5%)	0 (0.0%)	10 (13.9%)		
Total	5 (6.9%)	43 (59.7%)	24 (33.3%)	72 (100.0%)		

In Table 8. it can be seen that the highest frequency of respondents experiencing moderate anxiety with high school/equivalent education was 16 people(22.2%), junior high school/equivalent education as many as 13 people(18.1%). And there is 1 respondent with elementary education1 (1.4%)and college1 (1.4%)have a high level of anxiety.The results of the statistical analysis showed that the p-value was 0.000 where the p-value was <0.05, so Ho was rejected, meaning that there was a significant relationship between the level of education and the anxiety of pre-operative cataract patients in the Pre-Medication room at Bhakti Mulia Hospital. The correlation coefficient -0.478 shows a moderate level of closeness with a negative direction, meaning that the higher the level of education, the lower the level of anxiety.

Table 9. Relationship between experience and anxiety level of patients who will undergo cataract surgery

0 Times
1 time
Total

In Table 9. it can be seen that the highest frequency of respondents experiencing moderate anxiety did not have experience of undergoing surgery, namely as many as 33 people(45.8%), then there were 19 people who had 1 operation experience with a mild level of anxiety(26.4%). And there is 1 respondent(1.4%)with 1 operation experience has a severe level of anxiety.The results of the statistical analysis showed that there was a significant relationship between experience and the anxiety level of pre-cataract surgery patients in the pre-medication room at Bhakti Mulia Hospital, with a p-value of 0.000 where the p-value was <0.05, and a moderate level of closeness with a correlation coefficient of 0.513.

DISCUSSION
1. Anxiety level

Based on table 5. the results showed that the majority of respondents experienced moderate anxiety, namely 43 respondents (59.7%), while patients with severe anxiety were 5 respondents (6.9%), and patients who experienced mild anxiety were 24 respondents (33.33%). The results of this study indicate that respondents who have moderate anxiety are higher than respondents who have mild anxiety and there are some respondents who have severe anxiety. Anxiety is a vague feeling of discomfort or worry accompanied by an autonomic response (source unknown to the individual) so that the individual will increase alertness to anticipate (Syifa et al., 2019).

Anxiety is a vague fear accompanied by feelings of uncertainty, helplessness, isolation and insecurity (Stuart, 2014). Anxiety in patients with pre-cataract surgery at Bhakti Mulia Jakarta Hospital is different, this is evidenced by the results of the Spearman Rank statistical test which shows that the anxiety experienced by clients varies, this is because the response to anxiety experienced by clients is different. The results of the research showed that most anxiety levels were at moderate levels, with anxiety responses indicated by several things such as frequent shortness of breath, dry mouth, anorexia, headaches and frequent urination, increased alertness, tense looks, and feelings of discomfort. In addition, (Mulia et al., 2017), also states that causes of anxiety include: feelings of fear of not being accepted in a certain environment, traumatic experiences such as separation trauma, loss or disaster, frustration due to failure to achieve goals, threats to self-integrity such as physiological inability or disruption of basic needs, and threats to self-concept such as self-identity, self-esteem and role changes. The anxiety experienced by clients who will undergo cataract surgery is due to fears about the success of the operation to be undertaken.

According to the researchers' conclusions, the relatively high frequency of moderate anxiety in pre-operative cataract patients at Bhakti Mulia Jakarta Hospital is caused by various factors, especially feelings of fear and worry about the success of the operation and also related to the majority having no experience in undergoing surgery, this can be a stressor. which can cause anxiety if the client is unable to overcome it. The results of this study are in line with research conducted by with a sample of 95 people, it shows that most of the respondents experienced a moderate level of anxiety (62.1%). Mild anxiety (22.1%) and severe anxiety (15.8%). Signs that generally appear in respondents include frequent shortness of breath, slightly increased blood pressure, dry mouth, anorexia, diarrhea/constipation, headaches and frequent urination, worry if the operation to be performed fails.

A person's anxiety response depends on and influences the personal maturity of each individual, understanding when facing challenges, self-esteem and how coping mechanisms are applied (Stuart, 2014), besides that the defensive or self-defense mechanisms used in overcoming anxiety include suppressing conflict, impulses that cannot be accepted consciously, not wanting to think about things that make them less happy (suppression).

2. Characteristics of respondents

The results of this study indicate that the highest frequency of respondents was 38.9% aged 45-55 years, 56.9% were female, 31.9% had high school education/equivalent, and 58.3% had no cataract surgery experience.

3. Relationship between characteristics and anxiety level

a. Age

The results of this study indicate that there is a significant relationship between the age of the respondents and anxiety, with *p-values*= 0.006 and correlation coefficient0.320. Age shows the time of growth and development of an individual. Age is related to experience, experience is related to knowledge, understanding and views of a disease or event so that it will shape perceptions and attitudes. Maturity in the thinking process in mature individuals is more likely to use better coping mechanisms.

Likewise, from the results of observations and interviews obtained during data collection, it was found that the highest frequency experienced moderate anxiety, namely in the younger age group 45-55 years compared to the older age group and when interviewed some of them were in the age group 45- 55 years says heart palpitations, loss of appetite, dry mouth, anorexia, diarrhea/constipation, and headaches. And the observation results also showed that most of them showed signs of being surprised, short of breath, often asked to repeat questions, and had pale faces.

The older group revealed that they tended to surrender and entrusted all medical treatment processes to the medical team.

According to the conclusions of the researchers, the older a person is, the more his physical maturity will increase, and the more age will also increase one's wisdom in determining attitudes and making decisions, thinking rationally, controlling emotions, and being tolerant of other views.

This research is in line with the results of research conducted by (Vellyana et al., 2017)with a total sample of 58 respondents, it showed that there was a significant relationship between age and anxiety level with a p-value of 0.036 <0.05. This research is not in line with the research conducted by (Kuraesin, 2009) with the number of samples studied, namely 46 respondents, showing that there is no significant relationship between age and anxiety with p-value = 0.143 >α = 0.05.

According to (Vellyana et al., 2017)Mature age, that is, adults have a lower prevalence of anxiety levels compared to younger ages. In line with (Syafei & Suryadi, 2018)namely the maturity of adult individuals in the process of thinking is more likely to use good coping mechanisms compared to the group of children. The results showed that most of the age group of children who experienced fractures tended to experience severe anxiety responses compared to the adult age group.

b. Gender

The results of this study indicate that there is no significant relationship between the gender of respondents and anxiety, with*p-value*= 0.515 and correlation coefficient -0.078. A developmental psychological approach that emphasizes that adaptation during human development produces a different psychology between men and women, due to differences in roles, between men and women face different pressures in the initial environment when humans have developed. According to the conclusions of the researchers related to anxiety in men and women, women are more anxious about disability compared to men, men are more explorative, while women are more sensitive.This is in line with research conducted by (Prima, 2019)entitled The relationship of gender and education to the anxiety level of preoperative fracture patients in the surgical ward of a hospital. The sample studied amounted to 31 respondents showing no significant relationship between gender and anxiety with a p value = 0.274 withα = 0.05.

This research is not in line with observations(Vellyana et al., 2017),female gender is more at risk of experiencing anxiety than men, women more easily show the anxiety they experience than men. This is reinforced by theories related to anxiety in men and women (Sunaryo, 2018)which in his book he explains that in general an adult man has a strong mentality towards something that is considered a threat to him compared to women. Men have a broader level of knowledge and insight than women, because men interact more with the outside environment while most women only stay at home and carry out activities as housewives, so that the level or level of knowledge or transfer of information that is Limited knowledge of disease prevention.

c. Education

The results of this study indicate that there is a significant relationship between respondents' education and anxiety, with*p-values*= 0.000 and correlation coefficient-0.478. Maturity in the process of thinking is also influenced by a person's level of education. A sufficient level of education will make it easier to identify pressure within oneself and from outside oneself. Education is a process of renewing and advancing the growth and development of an individual with physical, spiritual, emotional, artistic and moral aspects. The level of education can affect the comprehension of individual knowledge of an event or fear of a threat. The level of education is also one of the important factors that influence a person's perception of being more receptive to new ideas, science and technology (Notoatmodjo, 2014).

According to the conclusions of the researchers, the higher a person's education level, the easier it will be to receive the information that is being suffered.This research is not in line with research conducted by (Vellyana et al., 2017) with the number of samples studied, namely 58

respondents, it showed that there was no significant relationship between education and anxiety with a value (p = 0.643 >α = 0.05).

However, this research is in line with the results of research conducted by(Prima, 2019) with the number of samples studied as many as 31 people showed that there was a significant relationship between education and anxiety levels with a value (p = 0.007 <α = 0.05). In line with this, (Stuart, 2014) explaining that a low level of education will cause a person to easily experience anxiety, the level of education of a person or individual will have an influence on the ability to think, the higher the level of education a person will find it easier to think and capture new information, including in terms of describing new problems.

d. Experience

The results of this study indicate that there is a significant relationship between respondents' experiences with anxiety, with*p-values*= 0.000 and correlation coefficient0.513. Positive and negative past experiences can influence the development of coping skills. According to the conclusions of the researcher, experience provides an overview of an event that has been or has been experienced by someone, so that someone will be better prepared to deal with it when it repeats or happens again. This research is not in line with research conducted by (Tantri, 2017)with the title factors that influence the level of anxiety of preoperative patients at PKU Muhammadiyah Gombong Hospital with a sample of 83 respondents showing no significant relationship between experience and anxiety with scores(*p-values*= 0.346 > α = 0.05).

However, this research is in line with the results of research conducted by(Kuraesin, 2009) with the number of samples studied as many as 46 people showed there was a significant relationship between experience and anxiety level with a value (p = 0.045 <α = 0.05). This is in line with what was stated by (Kumalasari & Dian S, 2018)that Past experience of illness, both positive and negative, can affect the development of skills using coping, one's success can help individuals to develop coping strength and vice versa if failure or emotional reactions cause a person to use coping that is maladaptive to certain stressors. Individual's past experiences in dealing with anxiety can influence individuals when facing the same stressor Because individuals have better adaptability or coping mechanisms, so that the level of anxiety will be different and can show a lighter level of anxiety (Havivah, 2019).

CONCLUSION

1. Characteristics of respondents that affect the level of anxiety, namely the highest frequency of respondents' age is 45-55 years old (38.9%), female sex (56.9%), high school education/equivalent (31.9%), and has not had surgery experience cataract (58.3%).
2. Most of the respondents experienced moderate anxiety, namely as much as 59.7%.
3. Of the 4 independent variables studied, there were 3 variables, namely the age variable, the education variable and the experience variable which stated that there was a significant relationship with the level of anxiety.
4. There is no significant relationship between gender and anxiety level.

ACKNOWLEDGMENTS

CONFLICTS OF INTEREST

All research teams agree with the final results of this study and there is no conflict of interest in this study.

REFERENCE

Budiman, Knoch Andrew M, & Sitompul Novita. (2013). *Pearls and Pit Falls to Improve Cataract Surgery Skills*. Perpustakaan Nasional RI.

Eva, P. R., & Augsburger, J. J. (2019). *Oftalmologi umum : Vaughan & Asbury*. ECG.

Gupta, V., Rajagopala, M., & Ravishankar, B. (2014). Etiopathogenesis of cataract: An appraisal. In *Indian Journal of Ophthalmology* (Vol. 62, Issue 2, pp. 103–110). https://doi.org/10.4103/0301-4738.121141

Havivah. (2019). Gambaran Tingkat Kecemasan Pasien Pre Operasi Katarak di Kabupaten Jember. *Jurnal Kesehatan*.

Ilyas, S. (2017). *Ilmu Penyakit Mata*. Badan Penerbit Fakultas Kedokteran Universitas Indonesia.

Kumalasari, D. N., & Dian S. (2018). *Konsep Dasar Keperawatan*. Samodra Ilmu.

Kuraesin, N. D. (2009). *Faktor-Faktor Yang Mempengaruhi Tingkat Kecemasan pasien yang Akan Menghadapi Operasi di RSUP Fatmawati* [Skripsi]. Fakultas Kedokteran dan Ilmu Kesehatan UIN Syarif hidayatullah.

Mulia, M., Keliat, B. A., & Wardani, I. Y. (2017). Cognitive Behavioral and Family Psychoeducational Therapies for Adolescent Inmates Experiencing Anxiety in a Narcotics Correctional Facility. *Comprehensive Child and Adolescent Nursing*, *40*(1), 152–160. https://doi.org/10.1080/24694193.2017.1386984

Mutiarasari, D., & Handayani, F. (2011). Katarak Juvenil. *Inspirasi*.

Muttaqin, A. (2020). *Asuhan keperawatan perioperatif: konsep, proses, dan aplikasi*. Salemba Medika.

Notoatmodjo, S. (2014). *Promosi Kesehatan dan Perilaku Kesehatan*. Rineka Cipta.

Prima, R. (2019). Hubungan Jenis Kelamin Dan Pendidikan Terhadap Tingkat Kecemasan Pasien Fraktur Pre Operasi Diruang Rawat Inap Bedah Rumah Sakit. *Jurnal Menara Medika*, *2*(1). https://jurnal.umsb.ac.id/index.php/menaramedika/index

Riskesdas. (2018). *Riset kesehatan dasar. Badan penelitian dan pengembangan kesehatan. Kementrian kesehatan RI*.

Singh, A., Dev, S., Nanwani, D., Prabhu, S., Ganesh, S., in Glaucoma, F., & Author, C. (2015). Evaluation and Comparison of Preoperative Anxiety in Patients Undergoing Combined Surgery (Phacoemulsification and Trabeculectomy), Trabeculectomy and Phacoemulsification. *International Journal of Health Sciences & Research (Www.Ijhsr.Org)*, *5*(2), 123. www.ijhsr.org

Smeltzer, S. C., & Bare, B. G. (2014). *Keperawatan Medikal Bedah Brunner and Suddarth's*. EGC.

Stuart, G. W. (2014). *Principles and Practice of Psychiatric Nursing (Principles and Practice of Psychiatric Nursing (Stuart))*. Mosby, Inc, an Affiliate of Elseiver, Inc.

Sunaryo. (2018). *Psikologi Untuk Keperawatan*. EGC.

Syafei, A., & Suryadi, Y. (2018). Pengaruh Pemberian Terapi Audio Murottal Qur'an Surat Ar-Rahman terhadap Tingkat Kecemasan pada Pasien Pre-Operasi Katarak Senilis. *Jurnal Kesehatan*, *9*(1). http://ejurnal.poltekkes-tjk.ac.id/index.php/JK

Syifa, A., Khairiyah, M., & Asyanti, S. (2019). Relaksasi pernafasan dengan zikir untuk mengurangi kecemasan mahasiswa. *Jurnal Intervensi Psikologi*, *11*, 1–8.

Tantri, D. (2017). *Faktor-Faktor yang mempengaruhi tingkat kecemasan pasien pre operasi di RS PKU Muhammadiyah Gombong. Kebumen: Stikes Muhammadiyah Gombong* [Skripsi]. Stikes Muhammadiyah Gombong.

Vellyana, D., Lestari, A., Rahmawati, A., Muhammadiyah, S., & Lampung, P. (2017). Faktor-Faktor Yang Berhubungan Dengan Tingkat Kecemasan Pada Pasien Preoperative Di RS Mitra Husada Paringsewu. *Jurnal Kesehatan*, *VIII*(1).

Wilkinson, J. M., & Ahern, N. R. (2019). *Buku saku diagnosis keperawatan: diagnosis NANDA, intervensi NIC, kriteria hasil NOC*. EGC.

Yudaniayanti, I. S., Yusuf, D., Setyono, H., Arifin, M. Z., Tehupuring, B. C., & Tjitro Handayani. (2012). Profil Tekanan Intra Okuler Kombinasi Penggunaan Ketamin-Xylazin Dan Ketamin-Midazolam Pada kelinci. *VetMedika J Klin Vet*.