

Analysis of inhibitors of cataract surgery using phacoemulsification method
At Smec Medan Hospital in 2018

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Abstract

Cataracts are a major cause of vision and blindness not only in Indonesia but also in the world (Ministry of Health, 2015). It is estimated that more than 50% of blindness is caused by cataracts. Phacoemulsification today is more widely used because the most recent cataract surgery method and is preferred because it uses a small incision technique, this causes the incidence of complications related to lower incision wounds, faster healing and visual rehabilitation than procedures that require incisions. the greater one. Tana's research in 2009 stated that the rate of cataract surgery in Indonesia was still low, namely for the Sumatra region as much as 14%. The study aimed to analyze the inhibitors of cataract surgery using phacoemulsification method at SMEC Medan Hospital in 2018. The study was designed using a cross sectional approach in 84 respondents. The results showed that there were significant relationships between work, fearful behavior of operations, access to health services, and access to ease of information with cataract surgery with phacoemulsification methods at Smec Hospital in 2018. There was a significant relationship between behaviors feeling no need for surgery with cataract surgery procedures Phacoemulsification at Smec Hospital in 2018. Feeling afraid of surgery is the main obstacle to cataract surgery with phacoemulsification method at Smec Hospital in 2018. It is recommended for cataract patients who will be able to improve their knowledge and prepare mentally and physically well in dealing with cataract surgery, so as to reduce patient anxiety about cataract surgery better.

Keywords: Hospital, Phacoemulsification, Surgery, Cataract

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Introduction

Cataracts are a major cause of vision and blindness not only in Indonesia but also in the world (Ministry of Health, 2015). It is estimated that more than 50% of blindness is caused by cataracts. Estimated incidence of cataract is 0.1% / year or every year among 1,000 people there is a new sufferer of cataracts. Indonesian people also have a tendency to suffer from cataracts 15 years faster than residents in subtropical regions, about 16-22% of cataract patients who are operated on are under 55 years of age. Survey data conducted by KEMENKES in 2013 showed that the prevalence of cataracts in Indonesia was 1.8%. The prevalence of cataracts in the province of North Sumatra is reported to be 1.4% or around 35,684 people of North Sumatra have blindness (Ministry of Health, 2013).

Blindness in cataracts is reversible and can be treated with surgery, which aims to restore the best visual acuity after surgery. There are several types of techniques, such as phacoemulsification, extracapsular cataract extraction (ECCE) and small incisional cataract surgery (SICS). Of these techniques phacoemulsification is the latest trend, considered safer, but requires greater investment. However, from the existing studies, SICS has the same quality in postoperative visual acuity with low complications, and is faster in mature cataracts, and more suitable in developing countries than phacoemulsification (Wahyuni, 2015).

Phacoemulsification today is more widely used because the most recent cataract surgery method and is preferred because it uses a small incision technique, this causes the incidence of complications related to lower incision wounds, faster healing and visual rehabilitation than procedures that require incisions. the greater one. This technique also creates a relatively closed system during surgery, thus controlling the depth of the front chamber and providing protection against vitreous positive pressure and choroidal hemorrhage. Although the majority are successful, cataract surgery can cause a number of complications, such as corneal edema, posterior capsule rupture, vitreous loss, presence of lens mass remaining and endophthalmitis (AAO, 2012). The most common complication is inflammation, where the inflammatory cascade reaction affects the clarity of the refractive media and corneal microstructure integrity, which is triggered by a stressor during surgery (Sorensen et al., 2012).

The SMEC Medan Hospital was established on March 4, 2006 providing special eye health services to all levels of society. Phacoemulsification technique is the most widely used

technique in handling cataract cases in this hospital. In addition to phacoemulsification, SICS techniques (Small incision Cataract Surgery) are also performed for certain cases of cataracts.

Cataract Surgical Rate (CSR) is the rate of cataract surgery per one million population per year, while Cataract Surgical Coverage (CSC) is the number of people who have cataracts in both eyes who get cataract surgery in one or both eyes. The International Center of Eye Health reported in the 2000 Journal of Community Eye Health that developed countries sound CSR 4000-6000 numbers and at this level it is very rare to find blind cataracts who are not operated on. In 2006 WHO said Indonesia's CSR figures ranged from 465. Perdami estimated the ability of cataract surgery by ophthalmologists in Indonesia in the range of 150,000-180,000 per year (Ministry of Health, 2015).

The high incidence of cataracts in Indonesia is caused by sick role behaviors that are less supportive to eye health (Arditiya & Rahmi, 2017). Sick role behavior is a way that individuals do in an effort to respond to the condition of their illness. Some sick role behaviors in cataract patients for example based on the results of research in one private clinic in Jember 7 out of 10 (70%) patients who will undergo cataract surgery say they are afraid of undergoing surgery (Wahyuni 2015). The results of Riskesdas 2013 reported three main reasons for cataract patients in Indonesia not having cataract surgery were not aware of cataracts (51.6%), unable to finance (11.6%) and fear of surgery (8.1%). In North Sumatra Province three main reasons for cataract patients not having cataract surgery are not knowing if cataracts (36.6%), unable to finance (10.6%) and fear of surgery (13.9%) (Ministry of Health, 2013).

Medical record data states that from January to March 2018 served 5,274 patients from the general section and 5,434 BPJS patients. After examination, 2,662 patients were diagnosed with cataracts. In January and March 2018 BPJS patients who underwent cataract surgery with phacoemulsification techniques as many as 1,760 people from 1,858 people diagnosed with cataracts, and general patients as many as 407 people in cataract surgery with phacoemulsification techniques from 804 people diagnosed with cataracts. When doctors diagnose cataract in accordance with the standards that apply at the SMEC Hospital, doctors explain to patients about the side effects and success of phacoemulsification techniques. However, not all patients diagnosed with cataract perform surgery. From the preliminary survey, 8 of the patients who had cataracts but did not have cataract surgery were interviewed and it was known that the main reason for not having cataract surgery was not having the cost and fear of surgery.

These data can indicate that there are still many people in North Sumatra who have obstacles in carrying out cataract surgery. But for North Sumatra alone there has been no research on the reasons or barriers to the community not doing therapy or cataract surgery. Based on this, the authors compile a research design entitled "Analysis of Cataract Surgery Inhibitors Using Phacoemulsification Method at SMEC Medan Hospital in 2018".

Materials and Methods

The study used a cross sectional design with 84 respondents. Bivariate analysis using Chi Square statistical test and multivariate analysis was carried out using multiple logistic regression prediction models. Before the questionnaire was used in data collection, the questionnaire was tested first to ensure valid and reliable to use.

Results

Characteristics of cataract patient respondents in SMEC Medan Hospital based on gender dominated by men as many as 46 people (54.8%) and female respondents as many as 38 people (45.2%). Based on the education of cataract patients in the SMEC Hospital Medan had \leq SMA education as many as 56 people or 66.7% and had a college education of 28 people or 33.3%. Based on the work of cataract patients in Medan SMEC Hospital, the average work was 47 people or 56.0% with age \geq 50 years as many as 52 people or 61.9% and had a socioeconomic level of \geq IDR 2,500,000.00 per month as many as 53 respondents or 63.1%.

Based on cataract surgery inhibitors using phacoemulsification method at SMEC Hospital Medan in 2018 it is known that out of 84 respondents, there were 57 people diagnosed with cataracts but did not take cataract surgery with phacoemulsification method or 67.9%. Most of the respondents claimed to feel no need to do phacoemulsification surgery as many as 62 people or 73.8% and as many as 56 respondents or 66.7% felt afraid to perform cataract surgery with phacoemulsification method. Based on the ease of access to health services it is known that as many as 67 respondents claimed to be easy to access health services (79.8%) and as many as 57 respondents or 67.9% also said it was easy to access information about cataract surgery.

The results of the bivariate analysis showed that there was a significant relationship between work, behavior feeling unnecessary operations, behavior fearing operations, access to health services, access to ease of information, cataract surgery with phacoemulsification method at Smec Hospital 2018. Results of multiple logistic regression analysis analysis

prediction model inhibitor of cataract surgery with phacoemulsification method at SMEC Medan Hospital in 2018 obtained the highest value of Exp

(B) which is significant is the fear of operating behavior that is 1.690, meaning that the fear of operation will affect 1,690 cataract surgeries with phacoemulsification method in Medan SMEC Hospital in 2018.

Table 1. The Analysis of Multiple Logistic Regression Prediction Model Analysis of Cataract Surgery Inhibitors with Phacoemulsification Method at SMEC Medan

Hospital

No	Variable	B	Std.Error	df	Sig	Exp (B)
1	Work	0,662	0,514	1	0,198	0,516
2	Education	0,539	0,554	1	0,031	1,514
3	Socioeconomic level	0,484	0,538	1	0,069	1,622
4	Behavior feels no need for surgery	0,204	0,589	1	0,729	1,227
5	Behavior is afraid of surgery	0,371	0,547	1	0,008	1,690
6	Access to health services	0,667	0,665	1	0,316	1,549
7	Access to ease of information	0,813	0,564	1	0,149	1,254
8	Constant	1,242	1,993	1	0,533	0,289

Discussion

Ease of respondents in accessing and obtaining various sources of information related to their health and the counseling and health education before the patient is discharged by a health worker or doctor at the hospital made cataract patients have a good knowledge to perform cataract surgery. But this has not made the patient immediately decide to perform cataract surgery with phacoemulsification method. This is because there is fear, worry and anxiety in the patient.

Kaplan and Sadock (2005) explains that anxiety clients preoperative influenced by several factors: age, experience of clients undergoing surgery, the concept of self and role, level of education, socioeconomic status, medical condition, access to information, the process of adaptation, the type of medical treatment and communication therapeutic. Phase preoperative assessment performed the initial operation, planned extension with the method according to the client's needs, involving family or significant others in the interview, ensure the completeness of pre-operation inspection, assess the client's needs in order to post-operative care. Integral assessment of client functions includes biological and psychological

physical functions that are indispensable for the success and success of an operation (Smeltzer, 2001).

Anxiety or fear felt by clients due to client ignorance about the disease and how to treat it, also caused by the fear of losing a lifetime of visual function will thus weigh on other family members. David (2003) explains that anxiety is an unpleasant and unjustifiable feeling of fear which is often accompanied by physiological symptoms perceived by the preoperative client.

According to Lestari (2015), knowledge is a very important domain in shaping one's actions (overt behavior). Someone has good knowledge so he will know, understand and understand about pre and post cataract surgery treatments so as to prevent the occurrence of postoperative complications that many patients fear.

Postoperative cataract complications can be prevented by adherence from patients after cataract surgery to control the hospital. To obey control, it requires a driving force, namely motivation for treatment / control (Notoatmodjo, 2007). There is a strong personal motivation (desire) to recover quickly and can see and support from the family that makes cataract patients obedient to treatment. Adherence to treatment as recommended by health workers (doctors & nurses) for cataract patients aims to find out the progress of the healing process and complications can be prevented earlier. In addition, obediently perform postoperative re-control, postoperative patients can also increase their knowledge as a basis for attitude formation and can encourage their interest or motivation to recover (Sulistiyorini, 2010).

Anxiety can arise from individual psychological reactions, anxiety arises automatically due to excessive stimulus and has an impact on the limitations of individual control (Siswoyo, 2014). There is a significant difference that before and after therapeutic communication (Health Education) on the level of gold in preoperative patients. This difference is marked by a decrease in the level of anxiety after being given therapeutic communication. It is expected that it can affect changes in behavior better in the face of operating actions (Siswoyo, 2015).

Conclusion

Analysis of cataract surgery inhibitors using phacoemulsification method at smec medan hospital in 2018 shows that feeling afraid of surgery is the main obstacle to cataract surgery with phacoemulsification method in RS smec in 2018.

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