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DELAY OF ELECTIVE OPERATIONS IN AWAL BROS PANAM PEKANBARU HOSPITAL JANUARI-APRIL 2018

Muhammad Eriex Fornando Suka^{*}, Adik Wibowo

Master's Program of Hospital Administration, Faculty of Public Health, Universitas Indonesia

*Corresponding author's e-mail: dr.eriexsuka@gmail.com

ABSTRACT

Background: Competition between hospitals is increasing, for that hospital should maintain the quality of service and patient satisfaction. Hospitals should have innovation targets for cost effectiveness and productivity without compromising patient safety and quality of care. Operation delays are one barrier to optimal patient flow, increasing patient anxiety, affecting interprofessional teamwork across the medical discipline and ultimately putting patients at risk of safety.

Methods: This research is descriptive research with a quantitative approach, data obtained from the surgery room register and interview which then grouped and analyzed.

Results: There was an elective delay in surgery of 38%, with the highest cause being the staffing factor of 81%, the highest percentage of delays was plastic surgery 61% of total surgery performed, The highest number of delays occurred in Urology that is 213 cases.

Conclusions: To reduce the delay required clear rules in the event of delays and rules of payment based on performance services, which is timeliness of attendance elective operation schedule is one of the assessment tools, and scheduling operations outside the time outpatient service.

Keywords: Delayed, operation theater, caused, elective operation

INTRODUCTION

Hospitals must provide personal health services in plenary.[1]One type of hospital services that must be provided a surgical service.[2] The operating room of the hospital is a special unit that serves as a place to perform surgical acts selectively and acutely, which requires sterile conditions and other special conditions [3].

Competition between hospitals is increasing, shown based on data from the Ministry of Health where since 2013 the number of hospitals continues to grow from 2228 to 2776 in 2017.[4,5]For that hospital must maintain the quality of service and patient satisfaction. Patient satisfaction is one of the most important things in reviewing hospital service quality. There are 4 aspects of quality that can be used as an indicator of the quality assessment of a hospital's service, namely: professional appearance in the hospital (clinical aspect), efficiency and effectiveness of service based on resource usage, safety aspect, patient comfort and patient satisfaction aspect served.[6]

Health services, in this case, the Hospital is the most expensive sector, thus making the hospital must have the target of innovation for cost-effectiveness and productivity without compromising patient safety and quality of care. Operation delays are one barrier to optimal patient flow, increasing patient anxiety, affecting interprofessional teamwork across the medical discipline and ultimately putting patients at risk of safety.[7] In 2010-2014, The Joint Commission's Office of Quality and Safety analyzed 522 the patient's

safety incident occurred due to delayed therapy, of which 415 cases resulted in death, 77 cases causing permanent disability and 24 cases leading to the addition of a length of stay. For that JCI recommends care organizations should be actively committed to avoiding delayed therapy.[8] This Delay can be due to various reasons including the number of personnel involved in the operation. Surgery is teamwork of surgical operators, anesthesiologists, nurses, and paramedics. Late operation execution may be caused by this team.[9] Late Scheduled operations may result in subsequent schedule changes with the patient's waiting time being increased. This may affect the patient's health condition and patient satisfaction level on hospital services. Also, due to the delay in operations, officers become overtime so they can affect the performance of the services provided.[10] Similarly, Peter et al. say the delay in operation in the first case may cause a chain effect on subsequent operations.[9] With the problem required scheduling which is effective for improving the reputation and performance of the hospital.[9]

The Awal Bros Panam Hospital is a Private C Type Hospital located on Jl. HR Soebrantas No. 88, Pekanbaru, inaugurated on January 22, 2014, by the Mayor of Pekanbaru Mr. Firdaus. Currently, RS Awal Bros Panam has three operating rooms with an average operating amount of 291 per month in 2017 with an average hospitalization BOR of 2017 of 48.51%. Facility surgery services performed at RS Awal Bros Panam are Obstetrics and Gynecology, General Surgery, Neurosurgery, Eye, ENT, Urology, Bone Surgery, Plastic Surgery and Vascular Surgery. The number of anesthesiologists as many as three people, operators as many as 18 people, and pediatricians as many as four people. Of the specialist physicians involved in the surgical services, 11 (44%) were full-timers, and 14 (56%) were part-timers.[11]

In 2017, timeliness on the schedule of elective operation according to the set schedule is 59.17% which is one of the quality objectives of the RS Awal Bros Panam operating theater unit and has not reached the set target of 90% to improve patient safety, patient satisfaction and to answer the competition between hospitals. The definition of elective surgical delay is a delay of elective operation more than 30 minutes from the scheduled time.[12] The objective of this paper is want to know the causes of delayed elective surgery at RS Awal Bros Panam and suggest recommendation about it.

RESEARCH METHODS

This research is quantitative research done in the operating Theater Unit of Awal Bros Panam Hospital. The data will be analyzed to determine the cause of elective operation delay in January to April 2018. The sample in this research is total sampling from all elective operation cases done in the Operating Theater Unit of Awal Bros Panam Hospital from January to April 2018. Data obtained from the register of the Operating Theater Unit of Awal Bros Panam Hospital to determine the number of operations and the delay, then grouped based on research conducted by Vas CB 2014, that is: medical cause of patient, cause of operation room, non patient medical cause, logistics and administration, staff, equipment/medicine / medical supplies, and other causes.[13]

RESULT

From the data collected during the research, the results are shown in table 1.

Table 1. Number of Operations at The Operating Theater Unit of Awal Bros Panam Hospital from January to April 2018

Months	Number of Operations	Emergency Operation	Elective Operation
January	308	15	293
February	280	11	269
March	295	19	276
April	308	17	291
TOTAL	1192	62	1129

It is seen that the number of operations in January - April of 2018 were 1192 cases with 1129 (94.79%) of which were elective operations and the highest elective surgery performed in January. The number of elective operation delays that occur in the Period of January-April 2018 can be seen in the following table:

Table 2. Number of Delays in Elective Surgery at The Operating Theater Unit of Awal Bros Panam Hospital from January to April 2018

Months	Elective Operation	Delayed	Percentage
January	293	111	38%
February	269	95	35%
March	276	109	39%
April	291	109	37%
TOTAL	1129	424	38%

From the table, we can see the highest number of delayed perform in January, but the highest presentation perform in March. overall percentage of delayed surgery was 38%. Elective operation delays can also be grouped by specialization to see the proportion of delays of each specialization can be seen in the following table.

Tabel 3. The proportion of Delayed Operation by Speciality

Specialty	Emergency	Elective	Total	Delay	Percentage
Obstetry &Gynaecology	36	94	130	53	56%
ENT	2	85	87	26	31%
General Surgery	17	358	375	61	17%
Neuro Surgery	1	7	8	4	57%
Urology	1	392	393	213	54%
Plastic Surgery	0	18	18	11	61%
Orthopaedics	5	53	58	17	32%
Eye Surgery	1	94	95	36	38%
Vascular Surgery	0	21	21	3	14%
Dermatovenerology	0	7	7	0	0%
Total	63	1129	1192	424	38%

The highest percentage of delayed operation by specialty was plastic surgery approximately 61%, following neurosurgery (57%)and Obstetrics & Gynaecology (56%). However, the highest number of delayed operation was Urology (213 cases). The cause of delayed can be seen in table 4.

Table 4. Causes of Delay Elective Operation at Awal Bros Panam Hospital January-April 2018

Causes	January	February	March	April	Total	Percentage
Medical Causes	5	3	3	5	16	4%
Operating Room Causes	17	11	10	11	49	12%
Patient causes	2	2	5	4	13	3%
Logistic&Administrative Causes	0	0	1	0	1	0%
Staf Causes	87	78	90	87	342	81%



Equipment, Clinical Causes	0	1	0	2	3	1%
Material, and Medications						
Other Causes	0	0	0	0	0	0%
Total	111	95	109	109	424	100%

The most causes of delayed operation are staff causes (81%), following operating room causes (12%). From the interview with the head of the surgical operating, nurse, surgeon, the causes of elective operational delay are: The doctor is working on the service in another room in the hospital, Waiting for team completeness, Doctors have surgery at other hospitals, There is no hospital regulation of how it should be if there is a delay so as not to impact to the next operation, The case is difficult, so the operation is elongated, There are an emergency case and no reason.

DISCUSSION

The percentage of elective surgical delay in RS Awal Bros Panam from January to April 2018 amounted to 38% of total elective surgery of 1129 cases. This figure is better when compared with other similar study results that are Askar M, 2011, the rate of delay in operation in Batam Authority Hospital of 93%, the results of research by Cox Bauer et al, 2016, the number of delay in three urban hospital operations in Milwaukee 88 %, and Kumar M et al, 2016, the rate of operating delay in India by 77%. It is still difficult to get the number of delay incidents from other private hospitals in Pekanbaru. Although it is better than other studies, this achievement has not reached the set target of 10%. Achievements need to be improved to increase patient satisfaction, avoid patient safety incidents, efficiency and effectiveness of operating rooms.[14,15,16]

Based on table 3, the highest percentage of delays was plastic surgery 61% of total surgery performed, followed by neuro surgery, Obstetry&Gynaecology and Urology. The highest number of delays occurred in Urology specialization that is 213 cases. When associated with a specialist medical staffing status, Plastic surgery, neurosurgery, and urology are part-time physicians. While Robyn from 4 doctors, two doctors are wartime physicians. Parttime doctors work in some places that can sometimes interfere with their performance in the hospital. Short time used for surgery, inpatient and outpatient services

Especially for obstetrics, because it involves a pediatrician, then the delay occurs because of each other waiting, consequently the nurse out of time to call operators and pediatricians. If one has not come, the operation will not start. Anesthesia delays are usually rare because anesthesiologists are always present in the operating room. Also, the possibility of obstetricians has patients give birth in the delivery room that time is very difficult to predict.

Based on the causes, the most causes of delayed operation is staff causes (81%), following operating room causes (12%). Staff Causes include staff delays and staff skills. The second operation is delayed because the same operator is late in the first operation entered in this group. If different operators are grouped in Operating room causes. Operating room causes include when the operating room is still used for city operations or previous operations elongated. special emergency surgery room is not available because the number of emergency surgical cases is not much in Awal Bros Panam Hospital. Prolonged surgery is usually due to difficult cases or poor staffing skills errors in the estimated duration of surgery.[17]

Estimated the correct operating duration, can improve the operating scheduling system. Olsen A et al. mentions in his study that the most significant challenge to creating an efficient surgery schedule is estimating surgery durations and scheduling cases in a manner that will minimize the time surgery is off schedule and maximize utilization of resources.[16]

CONCLUSION

The conclusion from this study is delayed operation at Awal Bros Panam Hospital is 38% from all elective surgery cases. The most cause is staff causes dan operating room causes. From interview we get some reason of the delay such as no rule if the operation is delayed, operation schedule can do in the same time with outpatient service, exhausted doctor, no standard duration of each operation and no reason. It is recommended to move to the next empty schedule or rescheduling to avoid the delay of a subsequent operation. Scheduling elective operations should be outside of polyclinic practice. A schedule replacement mechanism should be done if staff is exhausted due to the previous night's operation.

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