

Pre-surgical Patient Safety Application Simulation at Binangkang Hospital, Kotamobagu, North Sulawesi

Henny Kasseger¹, Abdul Hakim², Eddy Widjajanto³, Jack Roebijoso⁴

^{1, 2, 3, 4}Brawijaya University

Abstract: *Datoe Binangkang Hospital is the only public hospital in Kotamobagu. This makes the Datoe Binangkang Hospital have an important role and great responsibility in implementing health practices. Based on the initial survey of this study, there are still many medical practices that still have not implemented patient safety goals properly. There is still dissatisfaction because of coordination and communication with patients so that misunderstandings arise. As the only general hospital in Kotamobagu, vital activities regarding surgery are often carried out in Datoe Binangkang Hospital, accreditation which is still in C value is a major obstacle in improving service to the community. Especially from the data obtained the events that occurred in the operating room and in Intansi Intensive Care were still high. Where there were 178 people recorded phlebitis in 2016 and the incidence of patients falling in 2017 was 39 people. This study aims to simulate the pre-surgical patient safety application in Datoe Binangkang Kotamobagu Hospital. This study has the following conclusions: 1) A clear phenomenon with changes in the management of new health services has provided the fact that there is an increase in success, which can be seen from indicators of health efforts in the implementation of safety and quality management. 2) The profile of the number of prominent diseases treated in the hospital can be handled optimally so that the mortality rate can be reduced if the safety standards are applied correctly. 3) Profile of employee performance can be improved through education and training. The cost of treatment and treatment borne by the patient can be reduced when there are no complications due to errors in medical treatment and infection.*

Keywords: Pre-surgical, simulation

1. Introduction

Implementation of patient safety procedures is important in supporting the success of the hospital in handling patients. Alahmadi (2014) states that the condition of implementing patient safety is considered as important as 60 percent of patients feel satisfied with the procedures performed. Collaborative support from the head of the hospital up to the support of patients and families of patients is a factor that is considered important in supporting the realization of patient safety. Patient safety is an important issue in the world of health, and even concerns the world over the events that occur in the health world As noted at The American Hospital Association (AHA) where it was recorded up to 2000 Non-Expected Events (KTD) still occur quite often during medical actions which amounted to 3-6 percent.

The incidence of patient safety that causes KTD should be reduced to a minimum, this is intended so that incidents that occur due to incorrect procedures for implementing patient safety goals can be minimized. Medical personnel often ignore existing procedures such as some cases that occur in the United States, where there are 100 deaths due to medication errors that cause adverse drug reactions (Tan et al, 2013). The existence of a hospital as a place to support the achievement of a healthy and prosperous society must hold on to important procedures for patient safety goals. Improvements in the quality of health services must be carried out to obtain accreditation, which is a measure of the readiness of hospitals in carrying out medical practices in the purpose of providing health insurance to patients. Management of hospital services has important duties and functions in the focus of patient safety goals including the functions of planning, organizing, staffing, directing and

controlling functions. These functions have their respective roles in supporting the achievement of a good process for patient safety (Swanburg, 2002).

Datoe Binangkang Hospital is the only public hospital in Kotamobagu. This makes the Datoe Binangkang Hospital have an important role and great responsibility in implementing health practices. Based on the initial survey of this study, there are still many medical practices that still have not implemented patient safety goals properly. There is still dissatisfaction because of coordination and communication with patients so that misunderstandings arise. As the only general hospital in Kotamobagu, vital activities regarding surgery are often carried out in Datoe Binangkang Hospital, accreditation which is still in C value is a major obstacle in improving service to the community. Especially from the data obtained the events that occurred in the operating room and in Intansi Intensive Care were still high. Where there were 178 people recorded phlebitis in 2016 and the incidence of patients falling in 2017 was 39 people. This study aims to simulate the pre-surgical patient safety application in Datoe Binangkang Kotamobagu Hospital.

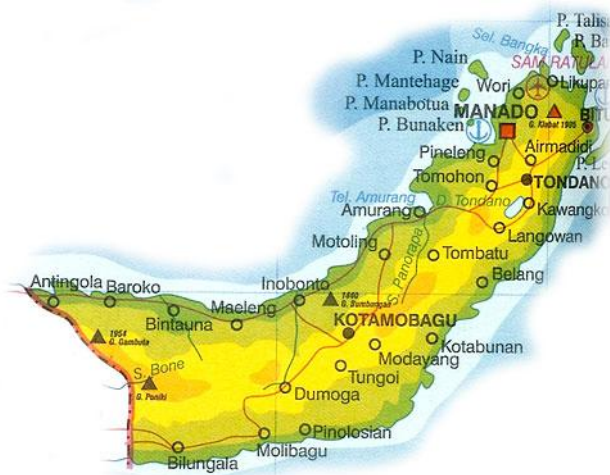


Figure 1: Location Map of Binangkang Hospital, Kotamobagu City

2. Methods

This study uses a descriptive qualitative approach. Qualitative research is research that produces descriptive data in the form of words or oral. Moleong (2007) reveals that in descriptive research the emphasis is on words, images and not numbers due to the application of quantitative methods.

3. Results

According to Freddy Ranguh (2013) by integrating the SWOT analysis model of organizational risk management, it can be used to manage performance by considering strategy and risk factors which are currently a must for a hospital, because by managing performance, hospitals can use all available potential resources optimally. In connection with the case study research in DatoeBinangkang Hospital, the management of safety and quality SWOT analysis is based on current strategic issues, strategic formulations and strategic research.

This strategic formulation must be identified in advance so that it can become a strategic theme. After the preparation of strategic formulations, the next activity is to group these strategies into each of the strategic issues that have been carried out in the SWOT analysis activities. The results of this grouping of strategic issues with various strategies will form a strategic theme. The decision to determine what strategic formulations should be considered in preparing a strategic theme is done by discussing the problems that are happening, what causes the problem, and potential problems that might occur. Determination of strategic themes must be guided by the vision and technicians that the company already has. If a company does not have a vision and mission, then it needs to be compiled using the brainstorming method, the way is to write down a vision and several missions that can support the vision statement.

How to Arrange Strategic Issues Strategic issues are based on analysis of vision and mission in accordance with the characteristics of the business we have. Based on the SWOT Analysis and identification of the national hospital, we can

identify four strategic issues that occur in hospital cases, namely as follows:

- 1) The high density in the inpatient room,
- 2) The queue time is longer,
- 3) Many prescription drugs from the doctor are rejected in the pharmacy section,
- 4) Customers find it difficult to find a parking space.

Which strategic themes are priority for the next year, SWOT analysis is needed more comprehensively, namely by carrying out factors of internal strength and weakness as well as opportunities and threats of external factors as follows:

- 1) Pharmaceuticals / drugs contribute 35% of the total income of this hospital. Thus the hospital must keep from causing a reduction in income from the drug, that is, the drug must be complete. Analysis of market opportunities (level of competition and number of drug suppliers), drug consumption behavior patterns are associated with economic culture levels, availability of substitute drugs, consumer bell power, ability to shop for drugs (ability to pay and willingness to pay).
- 2) Drug expenditure costs more than 60% of total hospital costs per year.

SWOT analysis

Strengths possessed in this study are

- 1) The number of inpatient visits is higher than competing hospitals,
- 2) The amount of income from medicine treated by maps reaches Rpxxxx (48% of total inpatient income),
- 3) Amount of income from outpatient medication reaching Rp. xxxx (68% of total outpatient income.
- 4) HR dispensaries are able to serve 24 hours,
- 5) Locations near the city center,
- 6) Collaborative referrals have long been established with health workers who practice independently and other health facilities,
- 7) Structure relatively stable financial and business profits, and
- 8) Ease of setting service rates including drug prices.

The disadvantages of this simulation are

- 1) Incomplete types of drugs,
- 2) Limited area of RS land,
- 3) The location of pharmaceutical installations is relatively hidden (inside the hospital environment).
- 4) Limitations of storage facilities (drug sales) affect service quality,
- 5) Information systems ranging from planning needs, procurement, distribution, use of drug stock is not clear / complete,
- 6) The number of outpatient visits is still far behind the competing hospitals and
- 7) Revenue Outpatient pharmacies are only Rp. xxxx or 14% of total revenue from drug sales in hospitals.

The opportunity analysis is as follows, namely

- 1) Having market share,
- 2) Quite large demand,
- 3) The level of pharmacy competition is still low,

- 4) Still unproductive local government-owned land located behind the Hospital,
- 5) The licensing policy for the establishment of pharmacies is relatively easy, and 6) Access to a number of drug manufacturers and suppliers is very easy.

Threats obtained are in the form of

- 1) Consumer self-medication behavior is still quite high,
- 2) JPS program policies, especially required patients, are only referred to government public hospitals,
- 3) The issuance of local regulations on free services to all economic health centers related to consumer purchasing power is still low,
- 4) Economic conditions related to consumer purchasing power are still low, and
- 5) There are still many independent public health workers who provide drug distribution for patients.

4. Conclusions

This study has the following conclusions:

- 1) A clear phenomenon with changes in the management of new health services has provided the fact that there is an increase in success, which can be seen from indicators of health efforts in the implementation of safety and quality management. The scope of the application of patient safety takes precedence on
 - Patients need treatment because they are sick and need treatment,
 - Families of patients through education and advocacy to overcome health problems that have occurred so that they do not recur,
 - Communication categorized as high risk for several events such as: wrong drug administration can be avoided when the correct communication standards have been applied.
- 2) The profile of the number of prominent diseases treated in the hospital can be handled optimally so that the mortality rate can be reduced if the safety standards are applied correctly.
- 3) Profile of employee performance can be improved through education and training. The cost of treatment and treatment borne by the patient can be reduced when there are no complications due to errors in medical treatment and infection.

5. Suggestions

This case study study, RSUD "DatoeBinangkang" needs to prepare itself for accreditation, so it can be concluded that the safety and quality management model can be used as a quality management model. By making various improvements in various fields of health services that are guided by hospital organization safety standards, the community and family are able to carry out 7 main functions to improve health and improve quality services.

References

- [1] Alahmadi, H.A. 2015. *Assessment of Patient Safety Culture in Saudi Arabian Hospitals*. Journal: BMJ Quality Safety on January 2, 2015.

- [2] Andermann et al, (2013). *Case Studies of Patient Safety Research Classics to Build Research Capacity in Low- and Middle- Income Countries*. The Joint Commission Journal on Quality and Patient Safety, Desember 2013 Volume 39 Number 12.
- [3] Baron, RA & Greenberg, J. 2000. *Behaviour in organizations (7th ed)*. New Jersey: Prentice Hall.
- [4] Ballard, K.A (2003). Patient Safety : A Share Responsibility. Online Journal of issues in nursing. Volume 8 – 2003 No. 3
- [5] Blower E.L et al. 2015. *Implementation of New tool to improve the efficacy and safety of surgical handovers*. International Journal of Surgery 12 (2015) 189-192.
- [6] Carayon, Pascale, Ayse P. Gurses. *Nursing Workload and Patient Safety—A Human Factors Engineering Perspective*. Patient Safety and Quality: An Advance-Based Handbook for Nurses: Chapter 30. Vol. 2. 2008
- [7] Carayon, Pascale. 2010. *Human Factors In Patient Safety As An Innovation*. Journal Applied Ergonomics 41 (2010) 657–665
- [8] E.L Blower, (2015). Implementation of a new tool to improve the efficacy and safety of surgical handovers. International Journal of Surgery 13 (2015) 189e192
- [9] Gibson, J.K.. 1996, *Perilaku – Struktur – Proses*, jilid I Edisidelapan, Adiani N (alihbahasa), BinaRupaAksara, Jakarta
- [10] Green, L.W. 1991, *Health Promotion Planning, Educational and Environmental*
- [11] Hellings, Johan. 2010. *Improving Patient Safety Culture*. International Journal of Health Care Quality Assurance, Vol 23 No.5, 2010.
- [12] Holden, Richard et al. 2014. *A Human Factors Framework and Study of The Effect of Nursing Workload on Patient Safety and Employee Quality of Working Life*. Journal: BMJ Quality Safety on September 4, 2014
- [13] Heather L. Short et al (2016). Clinical validity and relevance of accidental puncture or laceration as a patient safety indicator for children. Journal of Pediatric Surgery xxx (2016) xxx–xxx