

ORIGINAL ARTICLE

Development Strategy for Pharmacy Installation at a Hospital in Bitung City Using Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis Method

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ABSTRACT

Introduction: The installation of pharmacy as a revenue center is expected to have a big impact on hospital services, so a development strategy is needed to minimize weaknesses and threats with maximize strength and opportunities. **Methods:** Data collection methods are interviews, questionnaires and observations. Some of the observation indicators include: patient satisfaction, job satisfaction, employee morale and drug collecting time. Outpatients and all Hospital Pharmacy Installation (IFRS) employees were surveyed using a cross-sectional purposive sampling technique. The SWOT analysis is used to evaluate the IFAS and the EFAS processes and their results for the hospital. The results give a rating of strategic factors a scale from 4 to 1 depending on the variables affecting the hospital's status. **Results:** Based on the study results, the position of the Hospital pharmacy installation is in quadrant II, where a Strengths-Threats (S-T) strategy is needed to increase pharmaceutical care activities in hospitals that focus on clinical pharmacy services. The number of pharmacists and training for new employees should increase so that the quality of human resources increases. **Conclusion:** An ST strategy is needed to increase pharmaceutical care activities in hospitals that focus on clinical pharmacy services by Addition of pharmacists and providing training to current staff can help to increase the development of human capital. This will lead to an increase in hospital accreditation in the future.

Keywords: Development Strategy, Pharmacy Installation, Hospital, SWOT Analysis

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INTRODUCTION

Competition and strict health regulations make health facilities continue to compete for strategies and measurement tools to improve services (1). This plan is implemented by identifying the strengths, weaknesses, opportunities, and risks that will result in enhanced hospital accreditation. (2). Several indicators such as the number of patient visits and customer satisfaction are very important in assessing the performance of pharmaceutical installations (3). Increasing the number of admissions prescriptions in the pharmacy department can increase hospital profits (4). The Regional General Hospital Bitung is the only hospital owned by the regional government of North Sulawesi Province located

in Bitung City. Since changing its status to become a Unit Service Agency, the hospital has been required to continue to improve in providing excellent service to patients. So, it is important to determine a strategy in developing pharmaceutical installations. Strategic choice is linked with the company's vision, goal, and objectives, as well as its external and internal analyses, as well as the concept of an organization prepared to make strategic choices. That is, a company must be able to select its competitive edge theory in order to achieve a competitive advantage.

MATERIALS AND METHODS

Research type is quantitative descriptive. Data collection methods are interviews, questionnaires and observations (5). Planning, conducting, and evaluating interviews requires numerous considerations. These include identifying potential study participants, creating a research procedure, and crafting relevant interview

questions (6). Questionnaires to measure satisfaction were given to outpatients and to all IFRS employees using a cross-sectional purposive sampling technique (7). Some of the observation indicators include: patient satisfaction, employee job satisfaction, employee morale, drug collecting time, regular procedures, customer growth rate, drug management system, writing prescriptions according to the formulary, no errors in administering drugs. Strategic management will use SWOT analysis to evaluate the enterprise's Internal and external advantages and disadvantages, as well as possibilities and dangers are discussed (8).

Calculating IFAS and EFA (EFAS)

1. Developing internal and external environmental strategic elements
2. Determine the influence of variables on a scale ranging from 0.0 (not significant) to 1.0 (very important). These are based on the pharmacy's strategic location within the hospital. Each of them was given a score of ≤ 1.0 .
3. Giving a rating of strategic factors with a scale ranging from 4 to 1, based on the influence of the factors on the condition of the pharmacy installation at the Hospital. Positive variables (variables in the strength or opportunity category) are rated from +1 to +4 (maximum rated is +4, smaller are rated +3) and are compared to the average. Meanwhile, the negative variables (weakness and threat variables) are the opposite. For example, if the score for weakness or threat is more, the rating is 1. If there are fewer

ratings, it is 2.

4. The weight is multiplied by the rating. The result is the weighting factor value. The result is a weighted score ranging from 4.0 to 1.0.
5. The weighted score value was calculated by adding the weighted scores in the column. The overall score reflects the company's response to internal strategic considerations.
6. The research uses SWOT analysis to assess the IFAS and EFAS processes and their results on the hospital. SWOT analysis is used for both the comparison of two strategies that can be given in the research (9) and for both the analysis of single strategies.

Ethical Clearance

This research article got ethical clearance (No: 347/KEPK-AWS/VIII/2021) from health research ethics committee of Abdoel Wahab Sjahranie Samarinda Hospital dated 26th August 2021.

RESULTS

The SWOT Analysis utilized described the method to evaluate the hospital's As well as advantages and disadvantages, there are also opportunities and dangers outside the organization's sphere of influence. Among pharmacy installation's strengths, the ability to perform co-management activities that are developed in different modalities has been added to the SWOT analysis as summarized in Table I and Figure 1.

Table I: Strengths, Weaknesses, Opportunities, Threats Analysis

<p>IFAS</p> <p>EFAS</p>	<p>STRENGTHS (S)</p> <ol style="list-style-type: none"> 1. The existence of a vision and mission, organizational structure, a clear job description 2. There is a fixed procedure (SOP) 3. Giving drug information service to the patient 4. High employee morale 5. High employee job satisfaction 6. Waiting time for prescription service is good 7. Formulary based prescription 	<p>WEAKNESS (W)</p> <ol style="list-style-type: none"> 1. Less patient satisfaction 2. Pharmacist-Patient consultation / counseling has not been carried out 3. The patient's growth rate fluctuates 4. Drug management is not optimal 5. Promotion from IFRS to the community does not exist 6. Utilization of hospital information technology 7. The one-door system is not optimal
<p>OPPORTUNITIES (O)</p> <ol style="list-style-type: none"> 1. Government regulations related to IFRS management 2. Hospital policies that support IFRS operations 3. Customer demands for speed and accuracy of service 4. The existence of the BPJS program 5. MOU with distributors 6. Readiness of officers to receive prescriptions and 24-hour service 7. Clinical pharmacy services 	<p>STRATEGY S-O</p> <ol style="list-style-type: none"> 1. IFRS seeks to improve pharmaceutical management capabilities 2. IFRS maintains pharmaceutical activities according to the existing service flow 3. Improvement of IEC for customers 4. Increasing the quality and quantity of pharmaceutical human resources 5. Optimizing BPJS / SJSN patients 6. Conducting research or comparative studies with other IFRS which are superior in terms of clinical pharmacy services 7. Implement a reward and punishment system 	<p>STRATEGY W-O</p> <ol style="list-style-type: none"> 1. Improve pharmaceutical services focusing on customer satisfaction. 2. Drug management according to the standard of hospital services 3. Pharmacist special training in clinical pharmacy services and PIO 4. Optimizing cooperation with suppliers to meet drug needs 5. Form a promotion team 6. Provision of computers for SIM-RS operators
<p>THREATS (T)</p> <ol style="list-style-type: none"> 1. Competition with other IFRS 2. The quality of IFRS employees in competition 3. Advanced accreditation 4. Customer demands for drug completeness 5. Customer demands for patient visit to the inpatient ward 6. There are competing hospitals and clinics in the city of Bitung 7. Following developments in science and technology 	<p>STRATEGY S-T</p> <ol style="list-style-type: none"> 1. Improve pharmaceutical care activities in IFRS 2. Adding the number of Pharmacists 3. Conducting comparative studies with other superior IFRS 4. Improving the quality of human resources through independent learning 5. Outreach, inspection and routine inspections in order to improve accreditation 6. Make use of existing information technology 	<p>STRATEGY W-T</p> <ol style="list-style-type: none"> 1. Improving the quality of warehouse officers in the drug management system 2. Improving facilities and infrastructure in pharmaceutical installations to support smooth service and patient satisfaction 3. Creating a special room for consultation and PIO 4. Adding special science and technology officers for SIM-RS operations

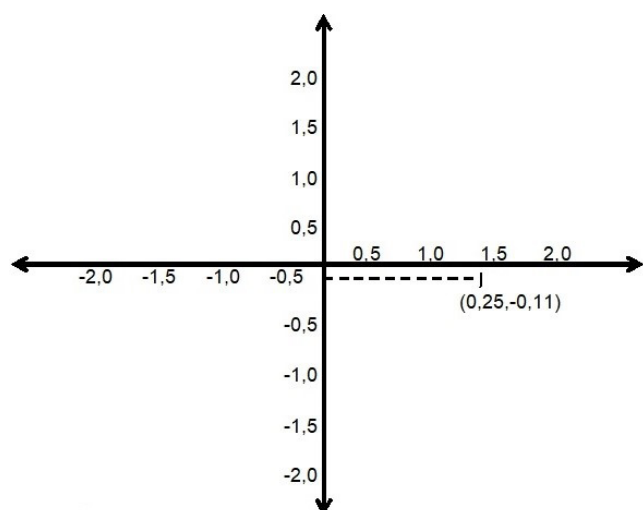


Figure 1: SWOT Matrix

DISCUSSION

Satisfaction of the Patient

The objective of this study is to ascertain the influence of a variety of service quality indicators on patient satisfaction in a hospital setting. The need to conduct research in this area is due to the growing importance of service quality in hospitals. The applied patient satisfaction questionnaire is of good standard based on validity and reliability (10). The gap value of the five dimensions of outpatient satisfaction based on SWOT from the highest to the lowest value in sequence, namely: the responsiveness dimension of -0.38, the empathy dimension of -0.23, the tangible dimension of -0.23, the assurance dimension of -0.08 and the reliability of 0.02 (11). It is possible to enhance healthcare delivery by focusing on areas highlighted via patient experience. From “not at all satisfied” to “extremely satisfied”, patients’ overall satisfaction was rated on a five-point scale. The outcome variable was dichotomized into “extremely satisfied” and “less satisfied” patients (12).

Prescription service waiting time

Measurement of drug collecting time is carried out every day between 08.00 and 15.00. The average waiting time for readymade drugs throughout 2019 was 96.86% and concocted drugs throughout 2019 was 93.78%. This proves that the Hospital Minimum Service Standards (SPM) is in accordance with Kepmenkes number 129/Menkes/SK/II/2008 Completed drugs 30 minutes (average 14.58 minutes) and devised drugs 60 minutes (average 22.42 minutes). The research indicates that the wait time for compounded drug services is significantly greater than the wait time for completed medicines. The availability of trained human resources, work hours, workload, and staff expertise will substantially impact prescription medication service wait times (13). Rescheduling personnel can reduce patient wait time (14). This is vital to dispel pharmacy wait times. Time is a major barrier to health care access. Recognizing that community pharmacies offer reduced wait times may

help promote access to community pharmacies (15).

Customer growth

The growth of outpatients was calculated from the number of prescriptions received per month in the pharmacy installed. This is because the patients bought the drugs from outside the hospital as the medicine was not available in the pharmacy. A national policy with a list of eligible drugs for coverage is required to define the minimum benefits of the patient to which they are entitled to, must be clearly communicated. Maybe an organization can make different procurement of national formulary listed drugs (16). Customer service quality reps, The level of digitization, followed by the quality of sales people indications of three services that influence customers (17). The majority of customer loyalty activities in rapid moving consumer items, such as medication, are conducted in the short term, which frequently results in low customer loyalty (18). As a result, the merchant or hospital must promote client loyalty in order to improve consumer loyalty.

Drug management System

The Pharmacy Installation’s medication management system is governed by Minister of Health Regulation No. 72 of 2016 on Pharmaceutical Service Standards in Hospitals. The results of observations related to drug management at the Hospital were less than optimal in terms of procurement. Effective medication distribution requires effective system design and management, among other things, to ensure consistent drug supply, preserve drug quality during distribution, and minimize unused medicines due to damage or expiration. This must be accomplished by preparing appropriately for their unique needs, maintaining correct storing data, organizing drug stockpiles, and informing predict medication requirements (19). The Plan-Do-Check-Action cycle has the potential to successfully provide a smooth and acceptable medication delivery procedure, therefore assuring the quality of medical treatment and eliminating medical mistakes (20).

Job satisfaction among employees

The degree of work satisfaction among employees is quite high. Regarding the statement items of service fees obtained and promotion of positions, the value is lower than other items. Based on discussions with the hospital’s pharmacy installation’s head, it was found that 26 employees on average are not State Civil Apparatus (SCA), only 3 people were SCA. For non-SCA pharmacists are partners under the North Sulawesi Provincial Government, so there are differences in service fees earned and it is difficult to increase/promote positions. Pharmacists agreed on the value of practice-based research and their capacity to comprehend it (21). Job satisfaction is valued differently in different organizations due to its favorable correlation with respect to each individual’s output, productivity, relationships with coworkers, physical and mental health, and overall

well-being. work satisfaction of pharmacists was found to be quite poor. Gender and other socio-demographic factors had little influence on work satisfaction (22). The distinction between employee and customer is becoming increasingly blurred, as an employee might also be a customer. Thus, employees must be pleased and driven in their personal lives in order to contribute at work. But motivating employees is also complicated since individuals are differently adapted, because of different motivation like social relationship, authenticity, career opportunities, salary (18).

Employee morale

Based on the observations of researchers, all pharmacy installation employees have a harmonious relationship between one and another. This can also be seen from the cohesiveness of the workflow of employees according to the implementation of SOPs so that employees work according to their job descriptions. Human resource capability should be improved by educating health care workers in medication management, ordering and report, and rational drug usage, as well as training institutions in medicine management (23). Work spirit can be increased by the customer. It includes salespeople's attitudes and knowledge, communication timelines, and responses to service failures (17). possessing a bachelor's degree and working and over 40 hours per week in a dispensing unit and having a bachelor's degree were all shown to have an impact on job satisfaction. Job happiness is linked to both productivity and general quality of life (22).

Fixed procedure

All regular procedures at the pharmacy installation at the hospital are made in the form of SOPs and then archived in the archive room located inside the pharmacy. Some participants mentioned the presence of clear rules and SOPs that help patients comply with their therapy. Poor administration to promote the hospital for society and inadequate patient care were recognized as major flaws (24). SOPs that connect to customers must be read by them. Compare their functional and technical quality experience with their expectations (17). Individuals and households must be empowered to comprehend health care quality and access to medications. This is a program that can contribute to system governance improvements in terms of openness, equity, and accountability (23). When humans and autonomous systems coexist, SOPs or stringent restrictions must be observed (25).

No errors in ad ministering drugs

The average absence of errors in drug administration was 98.37%. This score is categorized as good even though it is still below the standard of 100%. Medication errors occur frequently in medical wards (26). Only doctors can order medications on paper (27). Errors in administering medication can be influenced by several factors, including illegible prescription writing, a noisy environment, and work stress. Pharmacists have the expertise to identify, resolve, monitor, and prevent these

problems (28).

Prescribing according to the formulary

The percentage of compliance in prescription writing is obtained from the quotient of the number of drug prescriptions according to the formulary with the number of drug prescriptions written and then multiplied by 100%. The average prescription writing according to the formulary was 98.57%. This score is categorized as good even though it is still below the minimum service standard of 100%. The total number of prescriptions for each medication category was added together and represented as a proportion of all prescriptions written (29). Prescriber is using the hospital formularies as a standard. Hospital formularies should be formed based on local requirements, mainly of essential drugs, and prescribers should be encouraged to prescribe from them (30). Individual prescribers have an informal repertory of medications with which they are familiar, at least in terms of dose and adverse effects (31).

The pharmacy installation in a hospital must implement the Strengths-Threats strategy, which mean that it takes advantage of existing strengths to minimize threats that can occur by optimally increasing pharmaceutical care activities, for example clinical pharmacy activities, by increasing the number of clinical pharmacists in the hospital, so that special inpatient clinical services run well (32). Employees of the hospital have never conducted a comparative study regarding installation of pharmacy of a superior standard because it is constrained by costs, and it is difficult to execute during the Covid-19 pandemic. While there is no employee training in 2020, so it needs to be dealt with by conducting online training using technology. Evaluation after accreditation must be continued by paying attention to the readiness of human resources and supported by facilities so that errors can be immediately revised and corrected. At the end it can be said that installation of pharmacy in the Hospital will increase the chances of hospital accreditation (33).

CONCLUSION

It can be concluded that the position of pharmacy installation in the Hospital is in quadrant II, so an ST strategy is needed, to increase pharmaceutical care activities in hospital that focus on clinical pharmacy services by expanding pharmacists and employee training to increase human resources, so that they are able to collaborate, and take advantage of existing technology. Thus creating a superior and competitive environment will lead to an increase chances of hospital accreditation in the future.

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