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LITERATURE REVIEW

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Hospital Management Functions: A Literature Review

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Abstract

Hospital management is a process of organizing the available resources to support the efficiency and effectiveness of healthcare services provided. The main functions of hospital management include operational management, cost and financial management, materials management, and human resource management. This literature study aims to review each hospital management function based on previous studies within the last five years (2019-2023) obtained from scientific database searches. The inclusion criteria were studies with topics correlated to the four categories of hospital management functions and written in Indonesian/English. Articles that were published from books were excluded. A total of eight studies which were published in accredited journals and can be accessed in full-text form, were analyzed. The results of this study demonstrate that good management will improve overall hospital performance. High-quality financial management will support optimizing the availability of supporting materials for clinical and diagnostic services in hospitals. In addition, adequate human resources planning and organizing, as well as an appropriate work system design, will acknowledge the need for human resource development to increase the professional competence needed to provide health care in the hospital.

Keywords: Hospital management, Health care, Literature review



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INTRODUCTION

The hospital is an integral part of a social and health organization that has an important role in maintaining and improving the degree of public health. (1) The hospital has the function of providing comprehensive health services in the form of promotive, preventive, curative and rehabilitative efforts, in accordance with service standards that have been determined. (2) Hospitals have an obligation to create, implement, and maintain health service quality standards so that they can be implemented efficiently, effectively, and prioritize safety and are patient-oriented. (3) In Indonesia, service quality standards health in hospitals has been regulated and determined by the Hospital Accreditation Committee (KARS) which is assessed through the Hospital Accreditation Standards (SNARS) survey instrument. (4) This assessment needs to be evaluated periodically so that the hospital can provide quality services which ultimately aims to reduce morbidity and prevent the risk of mortality in patients receiving treatment. (4, 5)

Health services in hospitals consist of medical services (emergency units, outpatient care, inpatient care, medical rehabilitation), medical support (laboratory units, pharmacy, radiology), non-medical support (nutrition units, laundry, infrastructure), and administrative. (4, 6) To form an efficient, effective, and integrated health service, it is necessary to have a good hospital management system. Hospital management includes activities aimed at optimally managing human, financial and material resources by involving the coordination of all units or departments in the hospital. (7) Poor management performance can cause delays in the implementation of health services in hospitals, which will have an impact on reducing cost-effectiveness and increasing mortality rates in hospitals.(8)

In general, there are 4 hospital management functions in managing resources in the form of health services, namely operational management, cost and financial control, material management, and utilization of human resources. (9) Managerial teams at each level in the organizational structure hospitals have the duty and responsibility to provide policy decisions, strategic planning, operational planning, as well as supervision and control of the services available at the hospital. (8, 10) For this reason, hospital managers need to have in-depth knowledge of hospital management functions itself. This study aims to discuss each of the hospital's management functions based on existing literature sources.

METHOD

This research is a literature study that was compiled based on research results or scientific papers that have been published over the last 5 year period, from 2019 to 2023. The literature study consists of a series of processes that aim to review the results of previous research related to a topic to be discussed so that a holistic picture and final conclusion is obtained. (11) The stages carried out in this literature study are the process of identification, screening, and analysis (Figure 1).

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Figure 1. Categories of hospital management functions

Search scientific articles using the Google Scholar database, PubMed, Garuda Portal, and One Search using keywords related to hospital management functions, in Indonesian and in English. The keywords used are "hospital operational management" / "hospital operation management"; "hospital cost management" / "hospital financial management" / "hospital finance management"; "hospital material management" / "hospital human resource management" / "hospital human resource management" (Figure 2).



Figure 2. Literature study methodology flow

RESULT

Based on database search results, a total of 303 data were obtained, consisting of: 50 articles related to the operational management function of the hospital, 115 articles related to the hospital's cost management function, 18 articles related to the financial management function of the hospital, 19 articles related to the material management function of the hospital, and 101 articles related to the function Hospital HR management. A total of 34 of these articles were later deleted because they were identified as duplicate data, so that the remaining 269



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articles entered the next process. The data were then screened on the title and abstract sections, then selected based on predetermined inclusion criteria, namely research topics related to hospital management functions and article writing in English or Indonesian. If the publication of the article comes from a book then it is excluded from this study. From the screening process, 29 data were obtained that met the criteria. In the analysis process, there were 13 data that could not be accessed in full text form and as many as 8 published data from journals that were not indexed on Scopus or Sinta, were eliminated from this study. In the end, 9 journals were found that met the requirements to be analyzed in this literature study to review more deeply the functions of hospital management (Figure 3).

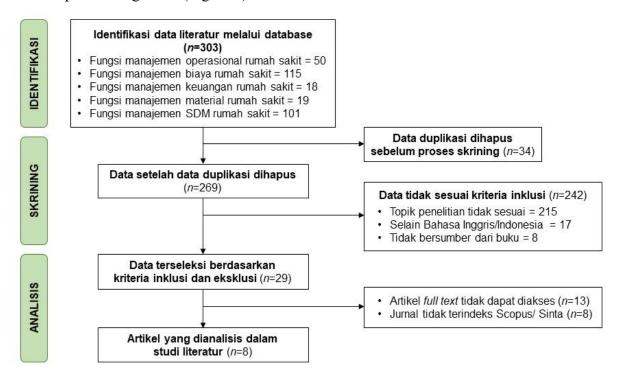


Figure 3. The process of selecting literature data according to the inclusion and exclusion criteria

DISCUSSION

Manajemen rumah sakit memiliki fungsi untuk mengelola sumber daya yang tersedia ke dalam implementasi pelayanan kesehatan agar dapat berjalan dengan optimal. Terdapat empat fungsi pokok manajemen rumah sakit, yaitu manajemen operasional, manajemen biaya dan keuangan, manajemen material, dan manajemen sumber daya manusia (Gambar 4). (9)



Figure 4. Hospital management function: management of resources for the implementation of health services at the hospital



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Hospital Operational Management Function

Operational management focuses on managing all available resources in the hospital to optimize the efficiency and effectiveness of the health services provided. Improving the quality of health services can contribute to overall hospital profitability. (9, 12) The results of research by Lin et al (13) show that there are four main strategies in supporting the success of operational management in hospitals, namely maintaining the relationship between providers (staff) and users. services (patients), increasing the competence of human resources through the support of training facilities, providing incentives according to standards and maintaining a positive work environment, as well as medical treatment support by hospitals.

Performance indicators of operational management in hospitals are service quality, waiting time, cost-effectiveness, and resource capacity management related to the health services provided. (14) The quality of hospital services can be assessed based on the perceptions of service providers and patients as users of health services, by three parameters, namely timeliness, consistency, and service preparedness. (9, 15) Implementation of services with a faster time shows the efficiency and effectiveness of hospital management. However, this requires good administrative management and resource management.(16)

To increase hospital profitability, it is necessary to have a cost reduction strategy that focuses on optimizing service output with minimal cost sources. (16) For example by establishing regulations on the number of days of treatment, modifying the flow of services to make it simpler, and utilizing hospital staff to the fullest. Based on the results of a case study by Barretiri et al (17) it was found that ineffective medical services were caused by a lack of integration and centralization of information systems in hospitals, which resulted in high costs and low quality of health services. Thus, the operational management function becomes an important matter for optimizing health services so that it can benefit patients as service users and the hospital as a service provider.

Hospital Finance and Cost Management Functions

Financial and cost management are important managerial functions to understand the utilization of financial resources and the determination of service fees that affect hospital profitability. (9) The Kludacz-Alessandri study (18) concluded that hospital performance is determined by the quality of costing. The hospital management team needs to have an understanding of the three basic financial reports, analyze these financial reports, and finally be able to identify areas that need managerial intervention. To understand the company's financial operational performance, the management team must go through three important stages, namely an annual check of the hospital's financial health status (balance sheet), properly managing daily expenses and income (income statement), and keeping track of changes in the hospital's cash flow so that stay financially healthy (cash flow statement).(9)

Based on changes in output, level of activity or volume of hospital services, expenses are classified into fixed costs and variable costs. Fixed costs are costs that do not depend on the burden of service, for example, hospital employee salaries and incentives. Meanwhile, variable costs are costs that depend on the burden of service, such as the purchase of medicines whose amount is adjusted to the number of patients served. can be allocated to certain activities) and indirect costs (costs shared by several departments or service activities). Rent costs,



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electricity costs, information system maintenance costs, surgical procedure costs and so on are also indirect costs. (9, 19) The allocation of these indirect costs is an important component of cost measurement at the sub-unit level, which can assist the management team in provide rational pricing decisions.(20)

In determining the allocation of indirect costs, there are two types of methods that can be used. (9) First, the traditional cost allocation method, namely the determination of indirect costs to the sub-unit level with a uniform amount based on the assumption of average resource utilization across all services together, which can lead to the risk of cost distortions. To balance it, you can use the second method, which is an activity-based cost allocation method whose amount is proportional to the resources used for services. However, this method can cause erratic changes in costs over a period of time.(9, 21)

The performance of health service facilities is also an important matter

CONCLUSION

Hospital management basically functions to manage available resources (human, financial, and material resources) into the implementation of health services. There are four main functions of hospital management, namely operational management, cost and financial management, materials management, and human resource management. The ultimate goal of hospital management is to optimize the quality of health services through productive human resources so as to support patient satisfaction and contribute to overall hospital profitability.

REFERENCES

- Hogg RA, Mays GP, Mamaril CB. Hospital Contributions to the Delivery of Public Health Activities in US Metropolitan Areas: National and Longitudinal Trends. Am J Public Health. 2015;105(8):1646-52.
- 2. Fetene N, Bezuidenhout M. Integrating promotive, preventive, and curative health care services at hospitals and health centers in Addis Ababa, Ethiopia. Journal of Multidisciplinary Healthcare. 2019; Volume 12:243-55.
- 3. World Health Organization, Organisation for Economic Co-operation and Development, The World Bank. Delivering quality health services: A global imperative for universal health coverage. Geneva: World Health Organization; 2018.
- 4. Komisi Akreditasi Rumah Sakit. Instrumen Survei Standar Nasional Akreditasi Rumah Sakit Edisi 1. Jakarta: Komisi Akreditasi Rumah Sakit; 2018.
- 5. Falstie-Jensen AM, Larsson H, Hollnagel E, Nørgaard M, Svendsen MLO, Johnsen SP. Compliance with hospital accreditation and patient mortality: a Danish nationwide



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population-based study. International Journal for Quality in Health Care. 2015;27(3):165-74.

- 6. Kementerian Kesehatan Republik Indonesia. Peraturan Menteri Kesehatan Republik Indonesia Nomor 3 Tahun 2020 Tentang Klasifikasi dan Perizinan Rumah Sakit. 2020.
- 7. Bastani P, Mohammadpour M, Bahmaei J, Ravangard R, Mehralian G. Hospital management by health services management graduates: the change paradigm in Iran. Heliyon. 2021;7(11):e08414.
- 8. Parand A, Dopson S, Renz A, Vincent C. The role of hospital managers in quality and patient safety: a systematic review. BMJ Open. 2014;4(9):e005055.
- 9. Ramani KV. Hospital management: text and cases. New Delhi: Pearson Education; 2013.
- 10. Terzic-Supic Z, Bjegovic-Mikanovic V, Vukovic D, Santric-Milicevic M, Marinkovic J, Vasic V, et al. Training hospital managers for strategic planning and management: a prospective study. BMC Medical Education. 2015;15(1):25.
- 11. Paré G, Kitsiou S. Chapter 9: Methods for Literature Reviews. 2017. In: Handbook of eHealth Evaluation: An Evidence-based Approach [Internet]. Victoria (BC): University of Victoria. Available from: https://www.ncbi.nlm.nih.gov/books/NBK481583/.
- 12. Gonzalez RE, Aleu FG, Valdez LM, Díaz JC, editors. Operations Management in Hospitals: A Literature Review2017.
- 13. Lin W-Y, Lee T-R, Sinnarong N, Sebastian SG, Wang C-Y. Key tactics analysis of hospital operation and management by different management levels: A case study in Taiwan. International Journal of Healthcare Management. 2022;15(2):142-51.
- 14. Burlea-Schiopoiu A, Ferhati K. The Managerial Implications of the Key Performance Indicators in Healthcare Sector: A Cluster Analysis. Healthcare (Basel). 2020;9(1).
- 15. Karaca A, Durna Z. Patient satisfaction with the quality of nursing care. Nurs Open. 2019;6(2):535-45.
- 16. Akinleye DD, McNutt LA, Lazariu V, McLaughlin CC. Correlation between hospital finances and quality and safety of patient care. PLoS One. 2019;14(8):e0219124.



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- 17. Barretiri L, Gonçalves BS, Lima RM, Dinis-Carvalho J. Improving hospital operations management to reduce ineffective medical appointments. Cogent Engineering. 2021;8(1):1904806.
- 18. Kludacz-Alessandri M. The Relationship between Cost System Functionality, Management Accounting Practices, and Hospital Performance. Foundations of Management. 2020;12(1):223-36.
- 19. Špacírová Z, Epstein D, García-Mochón L, Rovira J, Olry de Labry Lima A, Espín J. A general framework for classifying costing methods for economic evaluation of health care. Eur J Health Econ. 2020;21(4):529-42.
- 20. Carroll N, Lord JC. The Growing Importance of Cost Accounting for Hospitals. J Health Care Finance. 2016;43(2):172-85.
- 21. Javid M, Hadian M, Ghaderi H, Ghaffari S, Salehi M. Application of the Activity-Based Costing Method for Unit-Cost Calculation in a Hospital. Global Journal of Health Science. 2016;8.
- 22. Amos D, Au-Yong CP, Musa ZN. The mediating effects of finance on the performance of hospital facilities management services. Journal of Building Engineering. 2021;34:101899.
- 23. Luo X, Jiang C. Design of Hospital Operation Management System Based on Business-Finance Integration. Comput Intell Neurosci. 2022;2022:8426044.
- 24. Efendi S, Pratiknyo D, Sugiono E. Manajemen Operasional. Jakarta: LPU-UNAS; 2019.
- 25. Essila JC. Strategies for reducing healthcare supply chain inventory costs. Benchmarking: An International Journal. 2022.
- 26. Leaven L, Ahmmad K, Peebles D. Inventory management applications for healthcare supply chains. International Journal of Supply Chain Management. 2017;6:1-7.
- 27. Rahman MM, Yap YH, Ramli NR, Dullah MA, Shamsuddin MSW. Causes of shortage and delay in material supply: a preliminary study. IOP Conference Series: Materials Science and Engineering. 2017;271(1):012037.
- 28. Bialas C, Manthou V. Supply chain management in the healthcare sector: a research agenda. European, Mediterranean & Middle Eastern Conference on Information Systems 2014 (EMCIS2014); Doha2014.



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- 29. de Assis AG, dos Santos AFA, dos Santos LA, da Costa JF, Cabral MAL, de Souza RP. Classification of medicines and materials in hospital inventory management: a multi-criteria analysis. BMC Medical Informatics and Decision Making. 2022;22(1):325.
- 30. Blštáková J, Palenčárová J. Human Resource Management in Healthcare. SHS Web of Conferences. 2021;115:03003.
- 31. Pillai M, Senthilraj O, S S. Role of Human Resources Management in Healthcare Organizations: A Review. International Journal of Health Sciences and Research. 2019;9(1):228-35.
- 32. Ansah JP, Koh V, Bayer S, Harper P, Matchar D. Healthcare Human Resource Planning. In: Kahraman C, Topcu YI, editors. Operations Research Applications in Health Care Management. Cham: Springer International Publishing; 2018. p. 515-41.
- 33. Adebisi OA, Oladosu DA, Busari OA, Oyewola YV. Design and Implementation of Hospital Management System. International Journal of Engineering and Innovative Technology (IJEIT). 2015;5(1).
- 34. Johansen MS, Sowa JE. Human resource management, employee engagement, and nonprofit hospital performance. Nonprofit Management and Leadership. 2019;29(4):549-67.
- 35. Liu C, Bartram T, Leggat SG. Link of Patient Care Outcome to Occupational Differences in Response to Human Resource Management: A Cross-Sectional Comparative Study on Hospital Doctors and Nurses in China. Int J Environ Res Public Health. 2020;17(12).