Evaluation of the capacity of community health centers to achieve high-performance: A descriptive analysis of health survey data

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Evaluation of the capacity of community health centers to achieve high-performance: A descriptive analysis of health survey data

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Abstract

Background: The background of this research arises from the need to understand the overall performance of Community Health Centers (CHCs) in East Lombok Regency. CHCs play a crucial role in providing public health services, and the evaluation of their performance is essential to ensure the effectiveness of these services. Through descriptive analysis of health survey data, valuable insights are expected to contribute to the development of health policies and the improvement of health services in East Lombok Regency.

Purpose: To provide a comprehensive overview of the extent to which the performance goals of CHCs in the East Lombok region have been achieved.

Method: This research employs a descriptive analysis approach by collecting data through a health survey involving respondents from various layers of the community in East Lombok Regency. Carefully crafted survey instruments are used to gather information related to CHCs performance, covering aspects such as accessibility, service quality, and public satisfaction. Data collection is conducted meticulously and structured to ensure the validity and reliability of the results. Descriptive statistical data analysis is employed to intricately describe the conditions of CHCs performance. This research method is expected to provide a comprehensive understanding of the factors influencing CHCs performance in East Lombok Regency.

Results: There are several aspects that still need attention and improvement. In public health efforts, especially in health promotion, there are some indicators that are lacking, such as the number of types of printed health promotion media and the coverage of policies supporting the healthy living community movement. Maternal and child health also show satisfactory achievement levels, but there are still some variables that require further attention, such as the coverage of delivery services for mothers in health facilities and the coverage of services for children. Additionally, in the development of community oral health efforts, there are some aspects that are assessed as less satisfactory, such as the implementation of community-based oral health efforts in integrated health service posts and traditional health practices that have not reached the desired targets. Therefore, to improve the performance of Masbagik CHC, a thorough evaluation of these less satisfactory aspects is needed, along with the design of appropriate improvement strategies to achieve more optimal results.

Conclusion: Essential public health efforts, especially in health promotion, show less than optimal achievements. Meanwhile, environmental health and family health efforts demonstrate good achievements. Specific health services, such as vaccination, infectious disease control, and early detection of diseases, show good to excellent achievements. However, certain aspects of traditional health practices, sports, and occupational health show satisfactory achievements and require more attention. The implication is to enhance efforts in health promotion, strengthen traditional health efforts, and improve achievements in Hajj health, sports, and occupational health to achieve a more holistic public health.

Keywords: Community Health Centers; Performance Achievement; Performance Evaluation; Public Health Services.

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INTRODUCTION

Community Health Centers (CHCs), acting as the primary frontline for essential healthcare services, play a pivotal role in bolstering comprehensive public health efforts. Positioned as the initial tier of healthcare provision, CHCs act as the forefront in delivering evenly distributed and easily accessible health services to all segments of society (You, Li, Jiang, Li, Xie, & Han, 2023). Among their key functions is the provision of primary healthcare services, which encompasses activities focused on promotion, prevention, treatment, and rehabilitation. In the realm of promotion, undertake initiatives aimed at fostering community awareness regarding the significance of maintaining good health through educational campaigns, activities, and health promotion programs (Shi, & Stevens, 2023; Devodi, Zendejhtalab, Zare, & Vashani, 2023). They are actively engaged in preventive measures such as vaccination, early disease detection, fostering community involvement in healthy living initiatives, and implementing health programs. Moreover, as hubs for maternal and child healthcare, offering prenatal, delivery, and postnatal services for expectant mothers, along with monitoring children’s growth and development (Lawani, & Riendra, 2021). Additionally, provides reproductive health services, disseminates information on family planning, and offers counseling support concerning reproductive health.

In their commitment to public health, and prioritize specific healthcare services such as infectious disease management, vaccination initiatives, and the handling of particular disease cases. CHCs actively monitor and assess environmental health, including the supervision of sanitation and cleanliness standards (Topmiller, McCann, Hoang, Rankin, Grandmont, Pelzer, & Sripipatanso, 2023). Additionally, they play a crucial role in enhancing the accessibility of healthcare services. With CHCs widely dispersed across different regions, communities can readily access healthcare without enduring lengthy travels. Serving as referral centers for cases requiring advanced healthcare intervention, Censure seamless transitions to higher levels of care. Beyond being healthcare providers, CHCs serve as catalysts for raising awareness and fostering community engagement in endeavors to uphold and enhance health standards (Boston, Larson, Sheppler, O’Connor, Sper-Hillen, Hauschmidt, & Gold, 2023). Through their multifaceted involvement, also contribute significantly to advancing more inclusive and attainable health objectives for all strata of society.

Considering the pivotal role Community Health Centers (CHCs) play in delivering healthcare services to communities, it’s imperative to enhance the effectiveness and efficiency of their operations. The evaluation of CHC performance holds significant importance in the realm of public health provision (Oung, Kosirog, Chavez, Brunner, & Saseen, 2017). CHCs stand as fundamental pillars within the healthcare system, tasked with delivering essential healthcare services at the grassroots level. Assessing CHC performance is critical for gauging the degree to which these institutions successfully meet established health objectives (Lambert-Evans, Ponsar, Radd, Backly, Van Herp, & Phillips, 2009; Tabrizi, Farahbakhsh, Izadi, & Ahang, 2017). Through evaluation, both accomplishments and obstacles encountered by CHCs in ensuring community access, service quality, and satisfaction can be pinpointed (Qian, Rui, Jie, Jianwei, Ning, Yan, & Chaoxin, 2019). Performance assessment lays the groundwork for formulating more effective health policies. Insights gleaned from evaluations offer a holistic view of the factors impacting performance, enabling governmental bodies and policymakers to devise pertinent strategies to boost the efficiency, effectiveness, and pertinence of healthcare services delivered by CHCs (Zhaoxin, Shi, Lu, Xu, Liu, Jin, & Han, 2019). Furthermore, evaluating CHC performance furnishes valuable data for monitoring progress toward health-related targets, particularly in disease prevention initiatives, health advocacy, and specific healthcare provisions like vaccination programs (Liu, Huang, Fan, Liang, Lou, & Zhang, 2019). Armed with a comprehensive grasp of CHC performance, stakeholders can swiftly respond to evolving community needs and pinpoint areas necessitating improvement to attain superior overall health outcomes (Zhu, Zhang, Gong, & Li, 2021).

This study aims to provide a comprehensive overview of the extent to which CHCs have achieved their performance goals in the East Lombok
Regency. The research makes a significant contribution by offering concrete information groundwork for CHCs. This information is expected to guide decision-making, direct the formulation of more effective policies, improve services according to community needs, and optimize existing resources (Rezaee, Moini, & Asgari, 2012).

RESEARCH METHOD
This study adopts a qualitative descriptive methodology and focuses on Masbagik CHC, one of the community health centers situated in East Lombok Regency. The research process encompasses several structured and thorough stages (Creswell & Inquiry, 1998). Initially, the study will begin with a literature review to establish the conceptual framework and identify pertinent and measurable performance indicators. Following this, the research design integrates descriptive methods incorporating both qualitative and quantitative approaches. The qualitative aspect entails conducting in-depth interviews with stakeholders, including healthcare professionals, management personnel, and recipients of healthcare services. These interviews aim to explore their perspectives and experiences regarding the performance. Conversely, the quantitative facet entails analyzing secondary data sourced from patient records, community health reports, and performance metrics.

The next step is a field survey to collect direct data on-site. This survey may involve direct observation of healthcare service practices, facility inspections, and direct assessments of work procedures. The collected data will then be analyzed using statistical methods and qualitative analysis techniques, such as content analysis for interviews. This analysis will help identify the strengths and weaknesses, as well as factors contributing to performance achievements. Furthermore, the research results will be presented and discussed in a report covering findings, recommendations, and insights for improvement. This process will involve alignment with stakeholders and considerations of research ethics, including obtaining ethical approval before initiating the study.

RESEARCH RESULTS
Three primary aspects act as indicators of the community health center’s performance: essential public health endeavors, the advancement of public health initiatives, and the effectiveness of treatment and its networks. The performance of the community health center across each indicator can be outlined as follows:

![Figure 1. Results of Performance Assessment of Essential Public Health Efforts Masbagik Community Health Center](image)

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The data presented in Figure 1 depict various aspects of public health efforts, covering diverse areas such as health promotion, environmental health, family health, community nutrition improvement, disease prevention, and control, as well as specific health programs like vaccination. This data provides an overview of the community health center's performance at the community level and the achievement of health indicators such as experiencing several dynamics in its performance throughout the year 2023, reflected in various aspects of public health assessment.

In the Essential Public Health Efforts aspect, an achievement of 90.03% indicates relatively good performance. The Health Promotion sub-variable, although reaching an achievement level of 75.56%, shows potential for improvement as some print media fall below the target. However, the number of active integrated health care post and trained cadres experienced positive achievements, indicating effectiveness in empowering the community regarding health. Masbagik CHC achieved a good level of accomplishment in environmental health, with a score of 92.71%. Home survey services, particularly related to pregnant women and infants, showed satisfactory achievements.

In the Family Health aspect, an achievement of 85.89% indicates relatively good performance, although some indicators such as the coverage of delivery services in health facilities are still below the target. For community nutrition improvement, showed good achievement with a score of 92.45%. The coverage of nutrition services for pregnant women and infants reached the target, but some aspects, such as the coverage of malnourished toddlers receiving care, show potential for improvement.

Disease prevention and control achieved a level of accomplishment of 92.27%, indicating effectiveness in early detection efforts and the management of various diseases such as NCDs, sensory health, and infectious diseases.

The data in Figure 2 regarding the community health center's developmental efforts provide a fairly comprehensive overview. Overall, this category is rated quite well with a score of 81.99. The focus on community dental health efforts shows excellent results with an achievement of 97.4. Community dental health services in primary schools reached 100%, with education provided in 17 schools, while

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in integrated health care post, it achieved 94.7%. This achievement reflects success in providing dental health education in school and community environments, which is a crucial aspect of preventive dental care.

However, the focus on Traditional Health indicates a less satisfactory category with a score of 80.0. Despite traditional health efforts in all working area villages and the presence of independent care groups, some indicators show suboptimal results, such as only one village having a traditional healer with a registration certificate. Additionally, the sustainability of traditional health programs, such as traditional health services within buildings, has achieved less satisfactory results. The sports health category received a fairly good assessment with a score of 85.7. Achievements are evident in annual planning, physical fitness coaching, and sports health services. On the other hand, occupational health shows a fairly good result with a score of 83.3. There is annual planning, standard operating procedure, occupational disease services, early detection of occupational diseases, as well as the formation and coaching of occupational health efforts, all reaching 100%.

Unfortunately, in the aspect of Hajj health, the achievement is considered less satisfactory with a score of 60.6. Although coaching for prospective Hajj pilgrims reached 100%, tracking results for returning Hajj pilgrims and the number of returning Hajj pilgrims tracked indicate achievements below 80%. In-depth evaluation is needed to improve the effectiveness of the Hajj Health program. Overall, although some categories received less favorable ratings, evaluation and improvement efforts can help continually enhance the quality of the community health efforts they provide. In the development of community health efforts, an achievement of 81.99% indicates ongoing development efforts, although the Traditional Health sector still requires more attention. Dental health services at integrated healthcare posts and dental health education in primary schools show good results, but the traditional health sector needs improvement. Sports health and occupational health achieved relatively good levels of accomplishment with scores of 86.7% and 83.3%, respectively. However, the aspect of Hajj health shows less satisfactory achievement with a score of 60.6%, indicating the need for increased coaching and health awareness for prospective Hajj pilgrims. Alongside that, surveillance and vaccination reached good levels of accomplishment with scores of 96.0% and 98.4%, respectively.

Figure 3. Results of Treatment Performance Assessment

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The performance data of the CHCs and their network, particularly in treatment in Figure 3, provides a detailed overview. In the outpatient category, it is observed that general outpatient visits or general polyclinic reached 15% of the total visits, with a total of 3,000 patients. Meanwhile, dental outpatient visits or dental polyclinic reached 4% with 800 patients. Nevertheless, this achievement is still considered satisfactory with an attainment rate of 87.5%. As for inpatient care, despite inpatient visits accounting for only 1.5% of the total visits, the bed occupancy rate reached 69.2%, indicating a fairly good level of utilization of inpatient facilities. Overall, the treatment aspect is considered quite good with a score of 90.76. This is reflected in the good performance in outpatient care, inpatient care, pharmacy services, and laboratory services.

For instance, in the pharmacy services category, the percentage of essential drug availability reached 85%, and the rational drug use showed significant compliance rates, such as the use of antibiotics for non-pneumonia ARI reaching 100%. Additionally, the laboratory services also demonstrated high performance with all indicators reaching 100%, reflecting the overall integrity and quality of services in the laboratory examination field. However, further evaluation is needed to understand the reasons behind the high bed utilization rate in inpatient care, as well as to enhance the quality of services in outpatient care, especially in terms of general polyclinic and dental polyclinic. This in-depth evaluation is necessary to ensure that the sustainability of service quality can be maintained and improved over time.

DISCUSSION

Masbagik CHC uses three main aspects in its performance assessment, namely essential public health efforts, developmental public health efforts, and community health center and its network services. The data presented in the report provides a comprehensive overview of various aspects of public health efforts, including health promotion, environmental health, family health, community nutrition improvement, disease prevention and control, as well as specific health programs such as vaccination.

In the essential public health efforts aspect, achieved a performance score of 90.03%, indicating relatively good performance. Although the health promotion sub-variable has potential for improvement, the number of active integrated healthcare posts and trained cadres demonstrates the effectiveness of community engagement related to health. Furthermore, environmental health achieved a high score (92.71%), with home survey services, particularly related to pregnant women and infants, showing satisfactory results. However, the family health aspect needs more attention to improve the coverage of delivery services for pregnant women in health facilities.

In the realm of developmental public health initiatives, attained an impressive score of 81.99%, notably excelling in community dental health efforts with a performance rate of 97.4%. While traditional health and Hajj health exhibited less satisfactory results, sports health and occupational health aspects were deemed quite commendable. A comprehensive evaluation is essential to augment the effectiveness of the Hajj health program. Regarding network services, received a favorable rating of 90.76. Despite general outpatient visits and dental outpatient visits constituting 15% and 4% of total visits respectively, this achievement was still regarded as satisfactory (87.5%). Inpatient care demonstrated sound facility utilization (Bed Occupancy Rate of 69.2%). Pharmacy and laboratory services showcased high performance levels, with essential drug availability at 85% and rational drug use reaching 100%. Further assessment is warranted to comprehend the high bed utilization in inpatient care and to enhance the quality of services in outpatient care.

In summary, although there are areas for enhancement, the evaluation and subsequent adjustments will aid in refining the caliber of its community health initiatives. While developmental public health endeavors scored 81.99%, there is a need for heightened focus on the traditional health sector. Sports health and occupational health demonstrated satisfactory performance, yet improvements are required in the Hajj health aspect. Surveillance and vaccination efforts attained commendable levels, with scores of 96.0% and 95.4% respectively. A thorough evaluation is imperative to ensure long-term sustainability and enhance service quality moving forward.
To enhance its performance, take several strategic steps based on the evaluation and findings in the performance assessment report. Firstly, in the essential public health efforts aspect, improve the health promotion sub-variable, which still has potential for improvement, by strengthening health information and education campaigns through print media (Zhou, Tan, Lai, Chen, Cai, Yin, & Yang, 2022; Torres, Gold, Kaufmann, Marico, Hoopers, Totman, & Gottlieb, 2023). This step is aimed at ensuring that health messages effectively reach the target population. Additionally, continue to encourage active participation in integrated health care posts and empower trained cadres, with a focus on areas that are still below target.

In the aspect of family health, steps can be directed towards increasing the coverage of delivery services in health facilities. This may involve more intensive educational and advocacy campaigns to raise community awareness about the importance of health facilities in safe childbirth (Jamart, Van Durme, & Becch, 2023). The collaborate more closely with the local community to identify barriers that pregnant women may face in accessing health services and develop joint solutions (Feng, Ma, Zhang, Jiang, Lu, Chen, & Li, 2022). In the context of developmental public health efforts, and need to pay special attention to the traditional health sector, which requires improvement (Stanton, 2001; Mufitt, & Dickinson, 2016). Strengthening traditional health programs, including increasing the number of traditional health practitioners with registration certificates, as well as improving the sustainability of the traditional health program, can be a primary focus. This may include additional training, mentoring, and administrative support to enhance the quality and sustainability of the program (Cai, Mao, Coraz-Zing, Petrini, & Wu, 2015).

Regarding CHCs and their network services, a comprehensive evaluation is necessary to address the high bed utilization rate in inpatient care. Improvement measures may involve conducting root cause analysis to identify factors contributing to this high rate and developing strategies to optimize service delivery (Zhang, Peng, Liu, Wang, Li, & Yang, 2023). Additionally, enhancing the quality of services in the general outpatient clinic and dental outpatient clinic is essential to ensure compliance with established health standards. Efforts should also be directed towards improving aspects of Hajj Health, which have been deemed less satisfactory. A thorough evaluation concerning the tracking of prospective and returning Hajj pilgrims, along with the overall Hajj health program, is recommended (Jayanti, 2017). Implementing measures to enhance coaching for prospective pilgrims and strengthen post-return tracking systems can bolster achievements in Hajj health (Amiruzzab & Anggraeni, 2018). By taking a holistic approach to implementing these steps, address specific performance areas, enhance the quality of community health services, and ultimately fulfill its primary objective of improving the health and well-being of the community it serves.

Based on the findings of the performance assessment report, it is suggested to develop policies prioritizing health promotion through print media in the realm of essential public health efforts (Lin, Chen, & Cheng, 2014; Sudarto, Kristadi, Warnars, Ricky, & Hashimoto, 2018). Following this, efforts should be made to strengthen the involvement of integrated health care posts and provide training for health cadres. Additionally, in the developmental domain, there is a recommendation to enhance the emphasis on traditional health by increasing the number of certified traditional health practitioners and ensuring the sustainability of traditional health programs. Concerning the community health center and its network services, a comprehensive evaluation of bed utilization in inpatient care is advised, alongside initiatives to enhance service quality in both general and dental outpatient clinics. Improving the coaching program for prospective Hajj pilgrims and the post-return tracking system are also essential steps to enhance performance in Hajj health. These recommendations are anticipated to support and facilitate policies aimed at the overall enhancement in the quality of community health services.

CONCLUSION

Based on the performance assessment, it can be concluded that most of the community health efforts have achieved satisfactory levels of accomplishment. Essential public health services, especially in health promotion, show a reasonably good level of achievement, with the majority of variables reaching or approaching the set targets. Environmental health is assessed as good, with several indicators meeting
or exceeding targets, such as the number of surveyed houses and the coverage of medical waste management. However, there are some aspects that still need attention and improvement. In community health efforts, particularly in health promotion, some indicators are still lacking, such as the number of types of printed health promotion media and the coverage of policies supporting the healthy living community movement. Maternal and child health also show satisfactory levels of achievement, but there are still some variables that need further attention, such as the coverage of maternal delivery services in health facilities and the coverage of services for toddlers. Additionally, in the development of community health efforts, such as community dental health, there are some aspects that are considered less satisfactory, such as the implementation of community dental health efforts in integrated health care posts and traditional health that has not yet reached the desired target. Therefore, to improve the performance of Masbagik CHC, a thorough evaluation of these less satisfactory aspects is needed, along with the design of appropriate improvement strategies to achieve more optimal results.

REFERENCES


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