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CROSS-SECTIONAL SURVEY OF QUALITY AND SAFETY MANAGEMENT IN PUBLIC HEALTH CARE SERVICES IN RWANDA

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Abstract: Effective quality and safety management in health care services is crucial for improving patient outcomes and ensuring the efficient delivery of care. In Rwanda, public hospitals play a vital role in the health care system, yet there is limited research on the implementation and effectiveness of quality and safety management practices in these institutions. This study aims to assess the current state of quality and safety management in public hospitals across Rwanda through a cross-sectional survey. It seeks to identify strengths, gaps, and areas for improvement in health care delivery.

A cross-sectional survey was conducted among public hospitals in Rwanda, using a structured questionnaire designed to evaluate key aspects of quality and safety management. The survey covered areas such as patient safety protocols, quality assurance processes, staff training, incident reporting systems, and patient satisfaction. Data were collected from hospital administrators, healthcare professionals, and quality management personnel. Descriptive statistics and thematic analysis were employed to analyze the data.

The survey revealed that while many public hospitals in Rwanda have established basic quality and safety management systems, there are notable variations in the implementation and effectiveness of these practices. Key strengths identified include the presence of formal quality assurance policies and ongoing staff training programs. However, significant gaps were observed in incident reporting mechanisms and the systematic analysis of patient safety data. Additionally, challenges such as limited resources and inadequate infrastructure were frequently reported as barriers to effective quality management.

The findings highlight both progress and areas for improvement in quality and safety management within Rwandan public hospitals. To enhance health care delivery, it is crucial to address identified gaps by strengthening incident reporting systems, improving data analysis practices, and investing in infrastructure and resources. This study provides valuable insights for policymakers, hospital administrators, and health care practitioners aiming to elevate the standards of care in Rwanda's public health sector. Future research should focus on evaluating the impact of targeted interventions and exploring strategies to overcome existing challenges.

Key words: Quality management, Safety management, Public hospitals, Health care services, Rwanda, Cross-sectional survey, Patient safety, Quality assurance, Health care delivery, Incident reporting, Patient satisfaction, Health care professionals.

INTRODUCTION

Quality and safety management are pivotal to the effective delivery of health care services, ensuring that patient care is not only efficient but also free from harm. In Rwanda, public hospitals serve as the

cornerstone of the national health care system, providing essential services to a significant portion of the population. However, as the country continues to develop and expand its health care

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infrastructure, there is a critical need to evaluate and enhance the quality and safety practices within these institutions. Despite efforts to improve health care standards, limited research has been conducted to systematically assess the implementation and effectiveness of quality and safety management practices in Rwandan public hospitals. This cross-sectional survey seeks to fill this gap by providing a comprehensive analysis of current practices, identifying strengths, and pinpointing areas for improvement. By evaluating key aspects such as patient safety protocols, quality assurance processes, staff training, and incident reporting systems, this study aims to offer actionable insights into the management of health care quality and safety. The findings will be instrumental in guiding policymakers, hospital administrators, and health care professionals in their efforts to enhance the overall standard of care. Understanding these dynamics is essential for developing targeted interventions that address existing challenges and promote a culture of continuous improvement in Rwanda's public health sector.

METHOD

This cross-sectional survey was designed to assess the quality and safety management practices in public health care services across Rwanda. The study employed a structured questionnaire to gather comprehensive data from public hospitals, ensuring a representative snapshot of current practices and challenges within the sector.

The questionnaire was meticulously developed to capture key dimensions of quality and safety management. It included sections on patient safety protocols, quality assurance processes, staff training and development, incident reporting systems, and patient satisfaction. The survey was distributed to a diverse sample of public hospitals across Rwanda, including both

urban and rural settings, to ensure inclusivity and representativeness. Participants included hospital administrators, healthcare professionals, and quality management personnel, selected through stratified random sampling to reflect various roles and responsibilities within the hospitals.

Data were collected over a three-month period using a combination of electronic and paper-based survey methods. Hospitals were approached via official letters requesting participation, and surveys were distributed through secure channels. To ensure high response rates, follow-up reminders were sent to participants, and support was provided to address any queries regarding the survey.

Collected data were analyzed using descriptive statistics and thematic analysis. Descriptive statistics were employed to summarize quantitative responses, providing insights into the prevalence of specific practices and challenges. Thematic analysis was used to interpret qualitative responses, identifying recurring themes and patterns related to quality and safety management. The data analysis aimed to highlight both strengths and gaps in the current practices, offering a nuanced understanding of the state of quality and safety management in Rwandan public hospitals.

The study was conducted in accordance with ethical guidelines, ensuring confidentiality and anonymity for all participants. Informed consent was obtained from all respondents, and data were handled with strict adherence to privacy and security protocols.

While the study provides valuable insights, it is important to acknowledge potential limitations. The cross-sectional nature of the survey limits the ability to infer causality or track changes over time. Additionally, the reliance on self-reported data may introduce biases related to

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participants' perceptions of their practices and challenges. Overall, this methodical approach aims to deliver a thorough evaluation of quality and safety management practices, offering actionable recommendations to improve health care delivery in Rwanda's public hospitals.

RESULTS

The cross-sectional survey of quality and safety management in public health care services in Rwanda revealed both notable achievements and significant areas for improvement. The survey encompassed responses from a broad spectrum of public hospitals, providing a comprehensive overview of current practices in quality and safety management across the country.

Quality Management Systems: A majority of hospitals reported having formal quality management systems in place. These systems typically included structured quality assurance policies, regular internal audits, and established procedures for addressing patient complaints. However, the depth and scope of these systems varied, with some hospitals demonstrating robust implementation while others showed only basic adherence.

Patient Safety Protocols: Patient safety protocols were generally in place, including hand hygiene practices, infection control measures, and medication safety procedures. Nonetheless, the survey highlighted inconsistencies in the adherence to these protocols. For instance, while most hospitals had infection control measures, the consistency and rigor of their application varied significantly. This variation was often linked to differences in resource availability and staff training.

Incident Reporting Systems: Incident reporting mechanisms were present in most hospitals, but their effectiveness was uneven. Many hospitals had formal processes for reporting and investigating adverse events, yet the survey revealed

challenges in the timely reporting and thorough investigation of incidents. Some hospitals reported underreporting of incidents due to fear of punitive actions or lack of awareness about the importance of reporting.

Staff Training and Development: The survey indicated that ongoing staff training programs were implemented in many hospitals, focusing on areas such as patient safety, quality improvement, and clinical skills. Despite this, there were gaps in the frequency and comprehensiveness of training, particularly in rural and resource-limited settings.

Patient Satisfaction: Patient satisfaction was generally positive, with hospitals implementing various measures to gather and address patient feedback. However, the survey identified gaps in the systematic analysis of patient satisfaction data and the integration of feedback into quality improvement initiatives.

Challenges Identified: The survey identified several challenges impacting the effectiveness of quality and safety management. These included limited resources, inadequate infrastructure, and variations in the commitment to quality management practices. The lack of standardized protocols across different hospitals and regions further contributed to inconsistencies in quality and safety outcomes.

Overall, the survey results underscore the progress made in quality and safety management within Rwandan public hospitals, while also highlighting critical areas for improvement. Addressing the identified gaps and challenges will be essential for enhancing the overall quality of health care services and ensuring better patient outcomes across the country.

DISCUSSION

The findings from this cross-sectional survey of quality and safety management in

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public health care services in Rwanda illuminate both the progress achieved and the ongoing challenges within the sector. The presence of formal quality management systems and patient safety protocols across most public hospitals signifies a foundational commitment to improving health care standards. However, the inconsistencies in implementation and effectiveness highlight critical areas needing attention.

The variation in the depth and application of quality management systems suggests that while some hospitals have made significant strides in institutionalizing these practices, others still face substantial barriers. Factors such as resource limitations, varying levels of staff training, and differences in infrastructure contribute to this disparity. For instance, the inconsistency in adherence to patient safety protocols, despite their formal adoption, reflects the need for more rigorous and standardized implementation practices.

Incident reporting systems, though present, demonstrate uneven effectiveness. The underreporting of incidents and reluctance to fully investigate adverse events indicate a potential gap in fostering a culture of transparency and continuous improvement. Addressing these issues requires not only enhancing the reporting mechanisms but also creating an environment where staff feel supported and encouraged to report incidents without fear of retribution.

Staff training and development emerged as another area of concern. While many hospitals have ongoing training programs, the frequency and comprehensiveness of these programs vary, particularly in less-resourced settings. Ensuring consistent and high-quality training across all hospitals is crucial for maintaining and improving quality and safety standards.

The generally positive patient satisfaction reported reflects the efforts made by

hospitals to engage with and respond to patient feedback. However, the gaps in systematically analyzing and integrating this feedback into quality improvement initiatives suggest opportunities for enhancing the responsiveness of health care services.

Overall, the discussion emphasizes the need for a more unified approach to quality and safety management in Rwanda's public hospitals. Standardizing protocols, improving resource allocation, and fostering a culture of transparency and continuous learning are essential steps toward addressing the identified gaps. By focusing on these areas, the health care system can better ensure the delivery of high-quality, safe, and effective care to all patients across the country.

CONCLUSION

The cross-sectional survey of quality and safety management in public health care services in Rwanda provides a critical assessment of the current practices and challenges faced by public hospitals. The study reveals that while there are foundational elements of quality and safety management in place, including established policies and patient safety protocols, there are significant inconsistencies in their implementation and effectiveness.

Key findings highlight both progress and areas requiring improvement. Public hospitals in Rwanda have made commendable efforts in setting up quality management systems and safety protocols, which are essential for improving health care outcomes. However, the survey also uncovers notable gaps, such as variations in the adherence to safety protocols, inconsistencies in incident reporting, and limitations in staff training programs. These challenges underscore the need for a more standardized and comprehensive approach to quality and safety management across the health care system.

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To advance the quality of care and patient safety, it is crucial to address these gaps by enhancing the robustness of quality management systems, standardizing practices across hospitals, and investing in ongoing staff training and development. Additionally, fostering a culture of transparency and accountability in incident reporting will be vital for improving patient safety outcomes.

In conclusion, the insights gained from this survey are valuable for guiding future interventions and policy decisions aimed at strengthening quality and safety management in Rwanda's public health care sector. By focusing on these identified areas of improvement, stakeholders can work towards ensuring that all public hospitals provide high-quality, safe, and patient-centered care, ultimately contributing to better health outcomes and a more resilient health care system in Rwanda.

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