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Hospital Human Resource Management (HRM) Strategies in Facing Healthcare Workforce Crisis: Approaches for Efficiency and Sustainability

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ABSTRACT

Introduction: The healthcare workforce crisis is becoming increasingly severe, impacting the quality of care and the operational sustainability of hospitals worldwide. This challenge includes workforce shortages, high levels of burnout, and the need for rapid adaptation to policy and technological changes. This study explores effective human resource management (HRM) strategies to address the healthcare workforce crisis, focusing on operational efficiency and the sustainability of hospitals in managing the ongoing workforce challenges. By employing various strategies, hospitals can not only mitigate the effects of workforce shortages but also ensure long-term sustainability and improved patient care. Key strategies include optimizing healthcare recruitment processes, enhancing workforce retention through professional development, implementing flexible work arrangements, and fostering a supportive organizational culture.

Research Methods: The research method employed is a literature review involving collecting and analyzing relevant data to support the study.

Finding/Results: The research identified three key strategies adopted by hospitals to address the workforce crisis including the development of ongoing training programs, the implementation of technology for operational efficiency, and initiatives to enhance staff wellbeing and retention. Additionally, the success of these strategies is highly dependent on the local context and policy support. The implications of results provide guidance for hospital management in formulating HRM policies that are adaptives and responsive to crisis, thereby maintaining the quality of healthcare services are safeguarding of the well-being of healthcare workers.

Keywords: Hospital, HRM strategies, Healthcare workforce crisis **JEL Code:** 118, O15, M1

INTRODUCTION

According to the World Health Organization (WHO) report, it was estimated that there will be a shortage of 7.2 million health workers to deliver healthcare services worldwide (Adams et al, 2021). The healthcare sector faces recurrent crises regarding workforce availability, often exacerbated by economic pressures, demographic changes, and global health emergencies. Hospitals, as primary healthcare institutions, must respond effectively to workforce challenges to maintain service delivery. Human resource management (HRM) in healthcare plays a vital role in addressing these challenges, ensuring that hospitals can continue to deliver high-quality care. This systematic review aims to explore hospital HRM strategies in times of workforce crises, identifying key approaches that focus on efficiency and sustainability.

Effective human resource management strategies are essential for hospitals to navigate these crises, ensuring both efficiency and sustainability in healthcare delivery. This response synthesizes various scholarly works that highlight the importance of support systems, resilience, and strategic management in addressing workforce crises in healthcare settings. In the era of modernization, quality health services are increasingly attracting the attention of the public. They believe that something of quality is definitely better. Research in this field covers various aspects such as operational efficiency, service quality, human resource management, health information technology, and health policy.

The healthcare workforce crisis is caused by a combination of several interrelated factors, which have intensified over the past few decades. Some of the main causes include aging workforce, Burnout and Mental Health Struggles, Increased Demand for Healthcare Services, Inadequate Workforce Planning, Global Health Crises, Migration and Workforce Mobility and Policy and Funding Issues. Gray et al (2020) doing a research and found that Over half of respondents (62.1%) reported suffering from work-related stress, and this was highest amongst female and younger staff members). There is a need to better understand and address the factors contributing to stress including system and cultural drivers of presenteeism (e.g. staffing pressures) and to ensure settings are healthy working environments

As the global population ages, the demand for healthcare services has increased significantly, placing additional strain on the healthcare system. Elderly populations typically

require more medical care, leading to a surge in demand for healthcare professionals, which exceeds the available supply. In parallel with an aging population, many healthcare workers themselves are nearing retirement age. This results in a growing gap between the number of experienced workers leaving the workforce and the insufficient influx of new professionals to replace them.

Underfunding in the healthcare sector, particularly in developing countries, has limited investment in healthcare infrastructure and workforce training programs. Policies that fail to address workforce retention or job satisfaction also contribute to high turnover. In many regions, there has been insufficient long-term planning to align workforce supply with the growing demand. This mismatch has been worsened by an inadequate pipeline of healthcare workers entering the profession due to insufficient training capacity and limited investment in healthcare education. In some countries, the out-migration of healthcare workers to higher-income nations seeking better pay, working conditions, and career opportunities has contributed to shortages in their home countries, particularly in low- and middle-income regions

The healthcare workforce has faced significant challenges, particularly during crises such as the COVID-19 pandemic. Frontline healthcare workers have reported high levels of distress and disaffection, exacerbated by the COVID-19 pandemic. emphasize the need for long-term support systems for healthcare workers to mitigate the psychosocial impacts of such crises (Billings et al., 2021).

The pandemic requires people to make lifestyle changes, both in terms of thinking, behaving, and working. Mindset and behavior can improve the degree of public health and safety of medical personnel who are at the forefront of serving health. The government itself has run out of budget to finance the operations of special hospitals for COVID-19 patients due to large pandemic expenditures. To optimize funds, even some hospitals have begun to do efficiency by laying off their employees. Although it is not precise, but this happened in private hospitals, such as Faisal Islamic Hospital in Makassar City, according to reliable sources, the management temporarily dismissed 157 employees because visits decreased significantly by around 80-90%.

HRM strategies are essential for the long-term sustainability of healthcare systems. A well-managed workforce is more efficient, resilient, and capable of adapting to changes in healthcare demands. By investing in sustainable HR practices, hospitals can build a workforce

that is not only capable of managing current crises but is also prepared for future challenges. This is vital for ensuring the continued provision of healthcare services without compromising quality or accessibility.

LITERATURE REVIEW

Pearce and Robinson (1988) defined strategic management as "the set of decisions and actions that result in the formulation and implementation of strategies designed to achieve the goals of an organization." Meanwhile, Certo and Peter (1990) define strategic management as a process that repeats continuously intending to keep the entire organization following its environment. They added that strategic management is related to defining organizational performance, strategic choice variables, and competitive advantage.

Hospital Human Resource Management (HRM) strategies are underpinned by several management and organizational theories that inform how hospitals can effectively manage their workforce to improve efficiency, employee satisfaction, and overall service quality.

Strategic Human Resource Management (SHRM) Theory is an approach to managing human resources that aligns HR practices and strategies with the overall goals and strategic objectives of an organization. SHRM emphasizes the integration of HRM into the organization's strategic planning process, ensuring that human resource policies and practices support and drive the achievement of business goals. SHRM theory stresses that HR strategies should not operate in isolation but must be closely aligned with the overall strategic objectives of the organization. For hospitals, this means that HR practices should support goals such as improving patient outcomes, enhancing efficiency, reducing costs, and fostering a resilient workforce capable of responding to crises.

SHRM focuses on building and nurturing the competencies that give an organization a competitive edge. In the hospital context, this involves creating a skilled and motivated workforce that can deliver high-quality healthcare services. This may include continuous training, leadership development, and creating opportunities for healthcare professionals to specialize in areas critical to the hospital's mission (Wright et al 1992). SHRM establishes a direct link between HR practices and organizational performance outcomes. This means that the success of HR strategies is measured by their impact on critical performance indicators

such as patient satisfaction, staff retention, and financial performance (Delery et al, 1996). By doing so, SHRM ensures that HR contributes to the hospital's overall success. While traditional HRM may focus on short-term needs such as filling immediate vacancies or addressing immediate staff concerns, SHRM is concerned with the long-term sustainability of the workforce. It seeks to build a workforce that is adaptable, engaged, and aligned with the hospital's vision and long-term objectives (Bamberger et al, 2000)

In the dynamic environment of healthcare, SHRM encourages the development of flexible workforce strategies that can adapt to changes in the external environment, such as technological advancements, regulatory changes, and workforce crises like pandemic (Lengnick-Hall et al, 2005). This flexibility is essential for hospitals to respond to sudden shifts in demand and maintain continuity of care. SHRM also involves shaping an organizational culture that supports strategic goals. In hospitals, this includes creating a culture of continuous improvement, teamwork, patient-centered care, and innovation (Boxal et al, 2008). Effective HR strategies play a key role in shaping this culture by recruiting individuals whose values align with the hospital's mission and providing ongoing support for professional development.

Hospitals need to attract, retain, and develop talented healthcare professionals to ensure that they can meet both current and future healthcare needs. SHRM helps in crafting strategies to manage talent pipelines effectively, especially in specialized fields where skill shortages are common 8. SHRM is particularly critical during workforce crises, such as those experienced during the COVID-19 pandemic. It helps hospitals develop strategies to ensure that they can quickly adapt to increased demand, while also supporting their staff through flexible work arrangements, mental health support, and crisis-specific training 9.

By aligning HR strategies with the hospital's overall objectives, SHRM ensures that resources are used efficiently. Strategic workforce planning helps hospitals avoid overstaffing or understaffing, reducing costs associated with overtime, recruitment, and turnover (Becker et al, 2006)

Hospitals that implement SHRM engage in workforce planning to ensure that they have the right mix of skills, competencies, and staff numbers to meet future demands. This involves forecasting workforce needs based on trends in healthcare, such as the rise of chronic diseases or advances in medical technology (Lepak et al, 1996). SHRM integrates performance management systems that align employee goals with organizational goals. For example, hospitals may use performance reviews and incentive programs to ensure that healthcare workers are focused on patient satisfaction, teamwork, and continuous learning (Noe et al, 2020). Strategic HRM in hospitals places a strong emphasis on leadership development. This involves identifying and nurturing potential leaders within the organization, providing them with opportunities for growth, and ensuring that they are equipped to drive the hospital's strategic initiatives (Grove, 2007) Succession planning is a key component of SHRM, particularly in healthcare where leadership and specialized skills are critical. Hospitals that engage in SHRM develop strategies to ensure that leadership transitions are smooth and that there is no disruption to operations (Rothwell, 2010)

RESEARCH METHODOLOGY

This systematic literature review focusing on studies published from 2013 to 2023. The databases searched include PubMed, Scopus, and Google Scholar, using keywords such as "healthcare workforce crisis," "hospital human resource management," "healthcare workforce retention," and "sustainable HR practices in healthcare." Studies were included based on their relevance to HR strategies in hospitals during workforce shortages and crises, particularly those emphasizing sustainability and efficiency.

RESULT AND DISCUSSION

Hospitals face numerous challenges in managing their workforce, particularly during crises. Several factors influence Hospital Human Resource Management (HRM) strategies in addressing healthcare workforce crises while ensuring efficiency and sustainability. These factors affect how hospitals manage their workforce, maintain operational continuity, and adapt to changing healthcare demands. Table 1 shows the results of the literature review that has been carried out.

Author	Methodology	Result
Adula et al (2022)	is that it conducts a systematic literature review on the effect of human resource management (HRM) on organizational performance, using the PRISMA methodology to identify, screen, and analyze 25 relevant studies.	 Effective HRM strategies, such as empowering employees, are crucial for organizations to adapt to a rapidly changing environment and achieve high performance. The review proposes a conceptual framework for implementing tailored HRM practices to engage stakeholders and avoid resistance, which can help organizations improve their performance. The proposed framework can assist HR managers in identifying opportunities, addressing issues, and creating a positive organizational culture during crises, which can ultimately enhance organizational performance.
Widjaja (2021)	a systematic review to explore the impact of the human resource crisis on the health of medical personnel during the COVID-19 pandemic.	This study confirm that the human resource crisis is transmitted to medical personel through several models: (1) a decrease in the quality of health services (2) the impact of inadequate service measure (3) increasing demand for health services from patients (4) a wave of community protest for treatment (5) service and budget inefficiency
Anlesinya et al (2020)	this paper is that it systematically reviews the existing research on sustainable human resource management (HRM) to identify the key research themes, methods, and contextual focus of this emerging field, in order to highlight the gaps in the literature and propose a future research agenda.	There is an over-concentration on the ecological perspective of sustainable HRM and managers dominate the examined population. Moreover, there are geographical imbalances in sustainable HRM research. More so, the idea of bundling sustainable HRM practices together has received scanty research attention relative to the individual sustainable HRM best practices. Consequently, from a strategic HRM perspective, the authors highlight various ways to bundle sustainable HRM practices together. Also, the authors suggest that the ability-motivation-opportunity enhancing (AMO) theory's perspective provides particularly useful means for

Table 1. Systematic Literature Review

		this investigation. Furthermore, the findings suggest that sustainable HRM can influence organisations to become more competitive and effective in their quests to ensure economic prosperity, social well-being and ecological outcomes for their stakeholders.Practical implicationsThe evidence reveals that there are significant gaps in the literature on the topic and confirms that the field is still at its developmental stage. Hence, there is a need for more rigorous research on the topic to help develop a better understanding of this new field.
Faroughi et al (2022)	this paper is that it is a systematic review that analyzes the policy solutions adopted by hospitals during economic crises using the resilience system capacities framework.	 The economic crisis and adopted policies had a destructive effect on hospital contribution to universal health coverage. Short-term absorptive capacity policies were the most common, while adaptive policies were less common but more effective. Transformative policies focused on moving from hospital-based to integrated, community-based services.
Vries et al (2023)	this paper is that it is a systematic review, this systematic review identified 12 key themes of interventions that can improve job retention of nurses and physicians in a hospital setting, with a focus on onboarding, mentorship, and addressing stress and social support, rather than just increasing salaries.	 The review identified 12 themes of interventions that can be used to improve the retention of healthcare workers, including nurses and physicians, in a hospital setting. The intervention outcomes are categorized into substantial themes: onboarding, transition program to a different unit, stress coping, social support, extra staffing, coping with the demands of patient care, work relationships, development opportunities and department resources, job environment, work organization, recruitment approach, and technological innovations. The review found that onboarding programs and mentoring for nurses and physicians are recommended interventions to improve retention.

		3) The review highlighted the importance of interventions focused on stress coping for nurses, though similar interventions for physicians were lacking.
P. Gile et al (2018)	this paper is that it presents a systematic review of the empirical evidence on the relationship between human resource management (HRM) and performance in hospitals in Sub-Saharan Africa (SSA), finding that while most studies report positive impacts of HRM interventions on various performance measures, the evidence is scattered and lacks a structured set of effective one-to-one relationships between specific HRM interventions and performance measures.	 Most studies report that HRM interventions have positively impacted performance in SSA hospitals. The most commonly studied HRM practices are those related to employee motivation, skills, and empowerment. Training/education and task shifting are the most researched individual HRM practices.
Ererdi et al (2021)	this paper is that it provides a systematic review of research on international HRM practices in the context of three distinct research streams: economic crisis, natural disasters, and political uncertainty.	 The paper provides an overview of research on international HRM practices in the context of uncertainty and crisis, focusing on three distinct research streams: economic crisis, natural disasters, and political uncertainty. The paper finds that economic crises have the most significant and undesirable consequences on organizations and employees, and organizations need to make strategic decisions to manage their employees effectively during these times. The paper identifies gaps in the literature and provides a detailed map for future research, such as the need to explore socially responsible HRM practices, strategic planning of human resources, and the role of talent management during economic crises.

Salahi at al (2021)	The paper presents a	Three key dimensions for reinforcing
Salehi et al (2021)	The paper presents a systematic review of systematic reviews on techniques for reinforcing and maintaining human resources in healthcare organizations during long- term crises, identifying three key dimensions: organizational resilience, motivation-hygiene measures, and development of managers' soft skills.	- Three key dimensions for reinforcing and maintaining human resources in healthcare during long-term crises are: organizational resilience, motivation- hygiene measures, and developing managers' soft skills.
P. Gile (2013)	the paper by P. Gile	- The review examined the linkages
	(2013) is that it conducts a systematic review of the literature to understand the linkages between human resource (HR) practices and employee performance in the healthcare industry, and provides suggestions for future research in this area.	between HR practices and employee performance, guided by theoretical frameworks. - The study found disparities in how HR practices and performance are conceptualized and operationalized, but also identified some commonalities that can guide future research. - The paper concludes that a systems approach is needed to assess the structural and process dimensions, and apply comprehensive models to analyze the relationship between strategic HRM and employee performance at both the individual and organizational level.
Mostepaniuk et al	The paper presents a	-
(2023)	systematic review of the literature on efficient practices that healthcare organizations can implement to improve their sustainability, including improvements in management practices, leadership, manager selection, clinician engagement, organizational culture, virtual communication, environmental supply chain management,	practices that can improve the sustainability of healthcare organizations, including improvements in management and leadership, engagement of clinicians in management, promotion of organizational culture, use of virtual health communication, environmental supply chain management, and rational resource consumption and waste management.

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Amrutha et al (2020)	this paper is that it conducts a systematic review of the literature on green human resource management (GHRM) to identify current research trends and gaps, and proposes a conceptual model suggesting that employee green behavior at the workplace	 The systematic review identified three key clusters in the GHRM literature: green HR practices, employee green behavior, and organizational sustainability. Social sustainability was found to be the least explored area compared to economic and environmental sustainability. The paper proposed a theoretical model where employee green behavior
	at the workplace mediates the relationship between GHRM practices and the social sustainability of organizations.	model where employee green behavior mediates the relationship between green HR practices and social sustainability.
Manjula (2021)	this paper is that it conducts a systematic review of research articles published from April 2020 to November 2020 to understand the coping strategies of human resource (HR) practices and their impact during the "New Normal" phase of the COVID-19 pandemic.	practices that organizations adopted to cope with the challenges of the COVID- 19 pandemic The study identified the progress of HR from initial resistance to adapting to the "New Normal" during

The results of the literature review that have been carried out on 12 related papers show that there are various factors that cause the workforce crisis. Widjaja (2021) in his paper explained the human resource crisis is transmitted to medical personel through several models: (1) a decrease in the quality of health services (2) the impact of inadequate service measure (3) increasing demand for health services from patients (4) a wave of community protest for treatment (5) service and budget inefficiency.

This will be a serious problem if not handled properly. Healthcare workforce crisis can cause problems not only in the health sector but will also have an impact on other systems if not handled properly. In terms of operational efficiency, research on the balanced scorecard framework illustrates how healthcare systems can align their goals with efficient resource

management to enhance performance during crises (Vărzaru, 2022). This aligns with, who analyze the efficiency of global healthcare systems in managing pandemic-related challenges, revealing that many systems struggled under resource constraints (Breitenbach et al., 2021). The findings suggest that adopting frameworks that promote efficiency can lead to better outcomes during healthcare crises. Moreover, the integration of technology and innovative management practices is crucial for enhancing operational efficiency. discusses the impact of healthcare insurance on hospital management efficiency, indicating that effective management strategies can improve operational outcomes (Otaibi, 2023). Similarly, the application of blockchain technology in patient data management, as explored by , presents opportunities for enhancing the security and efficiency of healthcare operations (Elghoul, 2023). These technological advancements can streamline processes and reduce administrative burdens, allowing healthcare workers to focus more on patient care. Sustainability in healthcare management also hinges on understanding the broader socioeconomic factors affecting workforce dynamics. emphasizes the importance of equity in healthcare access, which is crucial for maintaining a stable and effective workforce (Milicevic, 2024). Additionally, the managerial challenges faced in rural and underserved areas, as highlighted by , underscore the need for tailored strategies that consider local contexts to optimize healthcare delivery (Babawarun, 2024).

Workforce planning is a critical strategy in managing short- and long-term healthcare needs (WHO, 2021). Hospitals engage in workforce forecasting models to predict future healthcare demands and adjust staffing requirements accordingly (Pallas et al, 2021). Studies emphasize the importance of skill mix optimization, where tasks are redistributed among healthcare professionals to maximize efficiency, particularly during crises (Buchan & Dal Poz, 2002). For example, optimizing the task shifting could potentially improve several health outcomes such as blood pressure, HbA1c, and mental health while achieving cost savings. Key elements for successful implementation of task shifting include collaboration among all parties, a system for coordinated care, provider empowerment, patient preference, shared decision making, training and competency, supportive organisation system, clear process outcome, and financing. (Leong et al, 2021)

Burnout is a significant factor contributing to high turnover rates in healthcare (Willard-Grace et al, 2019). Supporting healthcare workers' mental health and well-being, particularly during crises, is essential for retention (Priede et al, 2021) Studies show that

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hospitals that implement mental health support programs, such as counseling services and peer support networks, experience lower turnover rates and higher employee satisfaction. High job satisfaction is closely linked with workforce stability (Alsubaie et al, 2019) .Hospitals employ several strategies to improve job satisfaction, including offering flexible work arrangements (Nnko, 2022), promoting a positive organizational culture, and providing strong leadership support (Hussain et al, 2021). Employee recognition programs, which reward workers for their contributions, have been shown to improve staff motivation and retention (Naidoo et al, 2024).

Traditional HRM practices, focused primarily on recruitment and basic retention efforts, have proven inadequate in the face of these modern challenges, prompting the need for more innovative and comprehensive strategies (Humphreys, 2009). Hospitals must now not only address immediate workforce demands but also invest in long-term sustainability by adopting strategies that enhance job satisfaction, support mental health, and integrate technological advancements (Tenaw et al,2021). Workforce planning and optimization, including skill mix strategies and cross-training, have emerged as essential tools for hospitals to manage fluctuating demands during crises (Sarbadhikari et al, 2020). Moreover, flexible workforce models and the use of temporary staffing solutions have provided a buffer during peak periods of workforce shortages, though these approaches alone are insufficient without parallel investments in employee retention and well-being.

While many HR strategies focus on addressing immediate staffing needs, long-term sustainability requires a balance between short-term interventions and investments in workforce development (Dwerthman et al, 2011). Temporary staffing solutions can provide quick relief, but hospitals must invest in comprehensive retention and training programs to ensure long-term workforce stability. Given that the working environment has a huge influence on health and wellbeing; managers, administrators and policy-makers are urged to develop and maintain supportive work environments in order to improve staff and patient outcomes (Gray, 2020).

Strategic workforce planning, combined with technological adoption, can help hospitals maintain sustainable workforce models that meet future healthcare demand.

Hospitals must adopt a balanced approach to managing workforce crises by addressing immediate needs while ensuring the long-term sustainability of their HR strategies. For instance, while temporary staffing solutions can alleviate short-term

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shortages, investing in permanent retention and workforce planning strategies will ensure hospitals are better prepared for future challenges.

Based on the discussion above, to be able to overcome the healthcare workforce crisis there is Key strategies include optimizing healthcare recruitment processes, enhancing workforce retention through professional development, implementing flexible work arrangements, and fostering a supportive organizational culture. This requires all parties involved to support so that all systems can run smoothly. Not only from the side of stakeholders or health service providers, but must be supported by regulations that will oversee the realization of sustainable human resources management. All parties must move to overcome this problem, starting from health workers, leaders, including adequate technology and infrastructure support, an optimal work environment and the last is fully supported by regulations.

The ongoing evolution of healthcare demands that HRM strategies remain adaptable and forward-thinking. As the healthcare landscape continues to change, there is a pressing need for research that explores innovative HRM practices, particularly in the context of emerging health threats and technological advancements (Omotayo, 2024). Future studies should focus on longitudinal assessments of HRM strategies to determine their long-term effectiveness and sustainability.

In conclusion, addressing the healthcare workforce crises requires a multifaceted approach that incorporates support systems, operational efficiency, technological integration, and an understanding of socio-economic factors. By implementing these strategies, healthcare organizations can enhance their resilience and sustainability, ultimately leading to improved patient care and workforce satisfaction.

CONCLUSION

Human Resource Management (HRM) plays a pivotal role in shaping the quality of healthcare services, as it directly impacts the recruitment, retention, and performance of healthcare professionals who are essential to delivering patient care. Effective HRM strategies ensure that healthcare institutions attract qualified personnel, manage their workload efficiently, and foster a work environment that supports professional growth, ultimately enhancing service quality. One of the key ways in which HRM affects healthcare quality is through workforce planning and staffing. Ensuring that healthcare facilities have adequate staffing levels is crucial, as understaffing can lead to overworked employees, increased stress, and burnout, all of which can result in decreased attention to patient care and higher risks of medical errors. Research has shown that higher nurse-to-patient ratios, which are a result of strategic staffing practices, are associated with lower mortality rates and improved patient outcomes. Conversely, inadequate staffing can lead to delays in treatment, reduced patient satisfaction, and lower overall quality of care.

Furthermore, HRM impacts the quality of healthcare services through training and professional development programs. Moreover, HRM influences the quality of healthcare services by addressing issues related to employee burnout and stress. Working environment has a huge influence on health and wellbeing; managers, administrators and policy-makers are urged to develop and maintain supportive work environments in order to improve staff and patient outcomes. Healthcare workers, particularly those in high-stress environments like hospitals, are at risk of burnout, which can negatively impact their ability to deliver effective patient care. HRM strategies that promote work-life balance, provide mental health support, and create mechanisms for stress management are essential in mitigating burnout and maintaining a high standard of care. Effective HRM also involves ensuring fair and competitive compensation, which can affect employee satisfaction and retention. Hospitals that offer fair wages and benefits are more likely to retain experienced and skilled staff, which contributes to the continuity of care and sustained service quality.

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