

Enhancing Healthcare Resilience through Nurse-Health Assistant Collaboration during Crises: A Multidisciplinary Approach

Bashayer Abdullah Alaseeri¹, Ahlam Ali Mohammed Alahmari², Aziza Obied Ali Al Turkey³, Amaal Asaad Mufarh Al-Faifi⁴, Abeer Mohammed Alonizi⁵, Rehab Saud Jlal⁶, Makkayah Saad Alqahtani⁷, Baqshah Saud Mohammed Aldawsari⁸

1 Specialist Nursing, Abha Maternity and Children Hospital, Abha

2 Specialist Nursing, Abha Maternity and Children Hospital, Abha

3 Specialist Nursing, Abha Maternity And Children Hospital, Abha

4 Specialist Nursing, Abha Maternity And Children Hospital, Abha

5 Nursing, Dental Clinics Complex, Riyadh

6 Nurse, Dental Center, Riyadh

7 Health Care Assistant, King Saud Medical City, Riyadh

8 Nursing, Narges Primary Health Care Center, Riyadh

Abstract

In recent years, health systems have experienced numerous challenges and crises, requiring innovative strategies to ensure optimal healthcare delivery. Nurses are at the frontlines of healthcare systems, playing critical roles in patient care and addressing and managing critical health needs. However, increased workload during health emergencies leads to burnout and reduced quality of care. Health assistants play a critical role, providing essential support in patient care, documentation, and logistical tasks. This review explores the collaborative relationship between nurses and health assistants, emphasizing role clarity, mutual respect, and technology integration to enhance resilience and efficiency. It also highlights the transformative role of digital tools in communication, workflow improvement, and training. Strategic recommendations include joint training, resource allocation, and policy advocacy to foster collaboration. This enhances the resilience and capacity of health systems in the face of crises.

Keywords: Nursing, Health assistants, Crisis management, collaboration, Healthcare resilience, Patient care efficiency.

Introduction

Recently, global health systems have witnessed many challenges and health crises that have threatened their ability to provide health care services in line with the needs of communities and patients [1]. Therefore, the modern health care scene requires collaboration between multidisciplinary health teams [2].

Nursing is the first line of defense in health care systems, as nurses play an important role in providing nursing care to patients and managing critical cases [3]. Health crises are associated with dynamism and increased demand for nursing services, which imposes professional burdens and pressures on nurses, affecting the quality of health services provided to patients [4]. This highlights the need for and importance of health assistants in reducing the workload on nurses through basic patient care, logistical organization and non-clinical documentation, which enhances the ability of nurses to provide nursing services efficiently and accurately [5]. Likewise, health assistants play an important role in supporting nurses and maintaining the continuity of nursing care during crises and nursing shortages. The ability of health assistants to meet the immediate needs of patients and assist in operational functions enhances the resilience of health care systems during crises [6].

Therefore, a collaborative approach between nurses and health assistants contributes to patient management and enhances the resilience of health systems to crises. However, the effectiveness

of this collaborative approach depends on clarity of roles, comprehensive training, and mutual respect between nurses and health assistants [7]. The absence of clear role definitions sometimes leads to inefficiency or conflict between nurses and health assistants. Addressing these issues is critical to promoting effective teamwork and ensuring optimal patient outcomes [7,8]. In the modern healthcare landscape, digital technologies are playing a prominent role in enhancing collaboration between health teams, as digital task management systems, real-time communication platforms, and simulation-based training programs are revolutionizing the dynamics between nurses and health assistants [9]. These innovations facilitate seamless coordination, enhance preparedness, provide a framework for role integration, and address many of the challenges faced by healthcare systems [10].

Therefore, this review aims to explore the multifaceted role of health assistants in supporting nurses during health crises, emphasizing the importance of collaboration, integration, and the adoption of technology to improve nursing care during health crises.

The Role of Nurses in Crisis Management

Nurses play a key role in crisis management in healthcare. Nurses provide multifaceted roles to ensure effective healthcare delivery to patients.

Clinical Nursing Care: Nurses play a critical role in providing health and nursing care to communities and patients during crises. They manage patients' critical conditions and ensure their stability. This includes making rapid and accurate assessments to prioritize care for critical cases. In addition, nurses provide a variety of nursing practices such as administering medications, intravenous therapy, and oxygen support. Furthermore, nurses are often challenged with making clinical decisions in real-time under high-stress conditions, requiring advanced knowledge, critical thinking, and emotional resilience [3,11].

Patient Advocacy: Nurses are responsible for ensuring that patients' needs and preferences are respected during crises. This includes communicating effectively with patients and their families to explain procedures, provide emotional support, and address patients' concerns. Nurses also communicate with other healthcare professionals to secure appropriate care and resources for patients [12].

Leadership and Team Coordination: Nurses often assume leadership roles, especially during health crises when clear direction is essential. They coordinate multidisciplinary teams, ensuring smooth communication and assignment of tasks among team members, such as physicians, health care assistants, and support staff. Additionally, nurses oversee the implementation of protocols and guidelines, ensuring that care delivery is consistent with institutional and ethical standards [13].

Resource Management: Nurses play a pivotal role in managing common resource constraints during crises, prioritizing the allocation of critical supplies such as medications, personal protective equipment, and medical devices. This responsibility requires strategic thinking and the ability to make difficult decisions. Effective resource management by nurses ensures that available resources are optimally utilized to deliver nursing services efficiently and improve patient outcomes [14].

Crisis Adaptation and Resilience: Nurses must quickly adapt to new challenges. This includes adjusting to fluctuating patient volumes, implementing treatment protocols, and responding to unexpected complications. Nurses demonstrate remarkable resilience, whether it's redistributing tasks, mastering new technologies, or providing care in non-traditional settings such as temporary field hospitals or community outreach programs [15].

Education and Mentoring: Nurses often take on the role of educators, mentoring less experienced colleagues, health aids, or even community volunteers. They provide on-the-spot training in tasks such as infection control procedures, basic patient care, and the use of medical equipment. Their guidance ensures that the entire team works together and maintains high standards of care [16].

Psychosocial Support: Nurses also address the emotional and psychological needs of patients and their families. They use therapeutic communication techniques to ease fear and provide psychological and emotional support in critical settings such as intensive care units or disaster areas [17].

The Role of Health Assistants During Health Crises

Health assistants play important roles in providing healthcare and supporting nursing and specialized medical teams during crises. This ensures the smooth functioning of healthcare systems during crises.

Supporting basic patient care: Health Assistants play a vital role in addressing patients' basic needs during crises, such as assistance with mobility and hygiene. These tasks are especially critical in emergency situations where patients may lack the support of a caregiver. Health Assistants relieve the burden on nurses and medical staff, allowing them to focus on advanced clinical tasks. This ensures effective and continuous care during crises [18].

Assisting with monitoring and documentation: Health Assistants monitor patients' vital signs and perform medical documentation. They also monitor and report any changes in symptoms to nursing staff, facilitating timely interventions. Their ability to provide real-time data plays a critical role in informed decision-making, ensuring effective coordination of patient care [19].

Logistical and operational support: Health Assistants contribute significantly to the operational flow of healthcare facilities during emergencies. Their duties include sterilizing medical equipment, organizing supplies, and transporting patients between units. These logistical efforts are essential to maintaining functionality within healthcare systems [20].

Psychological and Emotional Support: Health assistants provide emotional support to patients, helping to relieve anxiety and stress during crises. This psychosocial care promotes patient recovery and mental well-being [21].

Bridging Communication Gaps: Health assistants act as a vital link between patients, nurses, and doctors, ensuring accurate and effective communication. This role is especially critical during crises, as clear communication prevents misunderstandings and promotes cohesive team efforts [22].

Infection Prevention and Control: Health assistants actively support infection control measures during epidemics and outbreaks. Their responsibilities include assisting with the use of personal protective equipment and educating others on hygiene practices [23]. This reduces the risk of transmission and ensures a safer healthcare environment.

Collaboration between health assistants and nurses

Collaboration between nurses and health assistants enhances the efficient and effective delivery of health care to communities and patients, especially during health crises. Their complementary roles enable health care teams to manage increased patient volumes and workloads [2]. Collaboration between health assistants and nurses revolves around clear and defined roles, mutual respect, and effective communication. Health assistants support nurses by handling non-clinical responsibilities such as basic patient care, monitoring vital signs, and maintaining operational workflow. This enhances nurses' ability to provide nursing care, make clinical decisions, manage treatments, and perform leadership tasks. Seamless integration ensures reduced duplication of effort and increases health care efficiency [2,8].

Effective collaboration between Health Assistants and nurses contributes to [23,24]:

- **Improved patient care:** Health Assistants automate routine tasks, allowing nurses to focus on critical clinical interventions.
- **Improved workflow efficiency:** Collaboration reduces delays in healthcare delivery. Health Assistants address immediate patient needs while nurses manage acute conditions.

- **Reduced burnout:** Sharing responsibilities reduces the physical and emotional burden on nurses, enhancing the mental health and job satisfaction of nurses and health assistants.
- **Increased adaptability:** Collaboration enhances nurses' ability to respond to healthcare, increase patient volumes, and adapt to resource constraints.

The Role of Technology in Enhancing Collaboration between Nurses and Health Assistants

Technology has transformed the healthcare landscape. It has also enhanced effective collaboration between health assistants and nurses. Technology enhances communication, streamlines workflow, supports training, and addresses logistical challenges. Leveraging these tools helps healthcare teams reduce inefficiencies, minimize errors, and improve patient outcomes.

Real-time Communication: Technology enables instant communication between health assistants and nurses, ensuring timely exchange of information. Mobile apps, messaging platforms, and intercom systems allow for real-time updates. Quick decisions during crises have a significant impact on patient outcomes [25].

Improved Workflow and Task Management: Task management systems and electronic health records improve communication between healthcare teams. Real-time updates ensure that all team members have access to accurate patient information, reducing duplication and improving healthcare delivery [26].

Training and Competency Development: Technological advances are enabling cross-training programs for health assistants and nurses. Simulation tools such as virtual reality (VR) prepare teams to respond to crises, enhancing skill alignment and collaboration among nurses and Health Assistants [27].

Resource Allocation and Logistics: Digital tools facilitate efficient resource allocation. Predictive analytics in resource management systems enable real-time tracking of equipment, supplies, and staff. These tools support informed decision-making [28].

Remote Collaboration in Resource-Constrained Environments: Telehealth technologies enable collaboration in remote or underserved areas. Video conferencing, remote monitoring devices, and teleconsultation platforms allow nurses and Health Assistants to deliver care across geographic barriers [29].

Strategic Recommendations for Enhancing Collaboration

To improve collaboration between health assistants and nurses, especially during health crises, it is essential to implement strategic interventions that address existing challenges and leverage available resources.

- **Define clear roles and responsibilities:** Creating comprehensive role descriptions for health assistants and nurses can eliminate ambiguity, reduce task overlaps, and enhance efficiency. Clear role definitions promote mutual understanding and ensure that each team member is working within their scope of practice, leading to improved coordination and accountability [30].
- **Implement joint training programs:** multidisciplinary training sessions should be conducted to promote a shared understanding of roles and responsibilities. Simulation-based training, virtual reality modules, and crisis-specific drills can prepare teams for high-pressure situations, enhancing their ability to respond cohesively during emergencies [31].
- **Improve communication channels:** Introduce structured communication protocols and adopt real-time communication tools, such as mobile apps and messaging platforms, to streamline the exchange of information between health assistants and nurses. These systems reduce delays and miscommunications and ensure that important information reaches the right person at the right time [29].

- **Leveraging technology to improve workflow:** Integrate task management systems and electronic health records to streamline task delegation and monitoring. These tools improve efficiency and coordination across teams by providing centralized access to up-to-date patient data and task progress [26].
- **Recognize and appreciate contributions:** Formal recognition of healthcare assistants' contributions fosters a sense of inclusion and respect within the healthcare team. Incentives, awards, and recognition at team meetings can improve morale and foster a culture of collaboration [16].
- **Address resource constraints:** Invest in scalable digital solutions and predictive analytics to effectively manage resources during a crisis. Ensuring adequate staffing, medical supplies, and logistical support will enable teams to function without unnecessary interruptions [25].
- **Advocate policy reforms:** Advocate for healthcare policies that integrate healthcare assistants as a vital component of the care team. These policies should include structured career development pathways and opportunities for professional growth, ensuring long-term employee engagement and retention [32].

Conclusion

Effective collaboration between nurses and healthcare assistants is critical in addressing the complex demands of health crises. Their complementary roles enhance patient care, streamline workflows, and ease professional burdens, ensuring that healthcare systems remain resilient under pressure. Leveraging digital technologies, role integration, and structured communication protocols further enhance this partnership, enabling teams to deliver high-quality care despite resource constraints. Healthcare systems can foster a culture of mutual respect and operational excellence through shared training programs, clarity of roles, and policy reforms. A collaborative approach enhances health systems' ability to respond to and manage health crises and sustain healthcare.

References

1. Filip, Roxana, et al. "Global challenges to public health care systems during the COVID-19 pandemic: a review of pandemic measures and problems." *Journal of personalized medicine* 12.8 (2022): 1295.
2. Korylchuk, Neonila, et al. "Challenges and Benefits of a Multidisciplinary Approach to Treatment in Clinical Medicine." *Journal of Pioneering Medical Sciences* 13 (2024): 1-9.
3. Sole, Mary Lou, Deborah Goldenberg Klein, and Marthe J. Moseley. *Introduction to Critical Care Nursing E-Book: Introduction to Critical Care Nursing E-Book*. Elsevier Health Sciences, 2020.
4. Khalfan, Seif S., et al. "Review of Work-Related Stress and the Incidence of Hypertension among Nurses." *Asian Journal of Research in Nursing and Health* 6.1 (2023): 343-351.
5. Carroll, Rachael. "Health Care Assistant-Registered Nurse dyads: A new concept of nursing team." (2020).
6. Sezgin, Emre, et al. "Readiness for voice assistants to support healthcare delivery during a health crisis and pandemic." *NPJ Digital Medicine* 3.1 (2020): 122.
7. Campbell, Amy Richmond, et al. "Interventions to promote teamwork, delegation and communication among registered nurses and nursing assistants: An integrative review." *Journal of Nursing Management* 28.7 (2020): 1465-1472.
8. Alghamdi, Abdullah Mohammed, et al. "Assessing the Impact of a Collaborative Nurse-Health Assistant Team Approach on Improving Patient Outcomes and Satisfaction in Primary Care Settings of Hafr Al-Batin: A Qualitative Study." *Journal of International Crisis and Risk Communication Research* (2024): 818-825.

9. Tortorella, Guilherme Luz, et al. "Impacts of Healthcare 4.0 digital technologies on the resilience of hospitals." *Technological Forecasting and Social Change* 166 (2021): 120666.
10. Mishra, Sandeep, and Manjari Srivastava. "ENHANCING ORGANIZATIONAL RESILIENCE IN HEALTHCARE: DYNAMICS IN DIGITAL ERA." *Decoding Stakeholder Experiences in the Digital Age*: 119.
11. Giménez-Díez, David, et al. "Nurses' Experiences of Care at Crisis Resolution Home Treatment Teams: A case study research." *Journal of psychiatric and mental health nursing* 29.1 (2022): 48-56.
12. Aghaie, Bahman, et al. "The experiences of intensive care nurses in advocacy of COVID-19 patients." *Journal of Patient Experience* 8 (2021): 23743735211056534.
13. Ellis, Peter. "Leadership, management and team working in nursing." (2021): 1-100.
14. Frank, Lori, Thomas W. Concannon, and Karishma Patel. *Health care resource allocation decisionmaking during a pandemic*. Santa Monica, CA: Rand, 2020.
15. Morton, Patricia Gonce, and Paul Thurman. *Critical care nursing: a holistic approach*. Lippincott Williams & Wilkins, 2023.
16. Tornwall, Joni, ed. *The Future of Nursing: Advancing Nursing Education and Practice Through Technology, An Issue of Nursing Clinics: The Future of Nursing: Advancing Nursing Education and Practice Through Technology, An Issue of Nursing Clinics*. Vol. 57. No. 4. Elsevier Health Sciences, 2022.
17. Maben, Jill, and Jackie Bridges. "Covid-19: Supporting nurses' psychological and mental health." *Journal of clinical nursing* 29.15-16 (2020): 2742.
18. Oparah-Evoeme, M. *Service changes' impact on outpatient nurses and health care assistants*. Diss. 88wwz, 2023.
19. Al Mansour, Hadi Hamad Hadi, et al. "Health Assistants and Technology: Navigating Digital Health Tools for Better Patient Engagement with Nursing in Emergency Department." *Journal of International Crisis and Risk Communication Research* (2024): 773-787.
20. World Health Organization. *Decontamination and reprocessing of medical devices for health-care facilities*. World Health Organization, 2016.
21. Osakwe, Zainab Totah, et al. "All alone: A qualitative study of home health aides' experiences during the COVID-19 pandemic in New York." *American Journal of Infection Control* 49.11 (2021): 1362-1368.
22. De Graef, Marjan, et al. "Implementation of Pharmaceutical Technical Assistants on Hospital Wards and Their Impact on Patient Safety and Quality of Care: A Qualitative Study on Nurses' Experiences and Perceptions." *Journal of Nursing Management* 2024.1 (2024): 7894331.
23. Almutairi, Ali Hussein, et al. "BRIDGING THE GAP: EXPLORING THE ROLES AND CONTRIBUTIONS OF HEALTH ASSISTANTS, NURSES, AND NURSING TECHNICIANS IN ENHANCING PATIENT CARE IN SAUDI ARABIA." *Chelonian Research Foundation* 17.2 (2022): 3855-3866.
24. Griffiths, Peter, et al. "Nurse staffing, nursing assistants and hospital mortality: retrospective longitudinal cohort study." *BMJ quality & safety* 28.8 (2019): 609-617.
25. Neyem, Andres, et al. "Improving Healthcare Team Collaboration in Hospital Transfers through Cloud-Based Mobile Systems." *Mobile Information Systems* 2016.1 (2016): 2097158.
26. Dubovitskaya, Alevtina, et al. "ACTION-EHR: Patient-centric blockchain-based electronic health record data management for cancer care." *Journal of medical Internet research* 22.8 (2020): e13598.

27. Al Yami, Sami Nasser Mesfer, et al. "INTEGRATING SKILLS: ADVANCING PATIENT CARE THROUGH COMBINED EXPERTISE IN NURSING, EMERGENCY MEDICINE, AND HEALTH ASSISTANCE." *Chelonian Research Foundation* 18.1 (2023): 177-190.
28. Hassan, Ahmed, and Ali H. Mhmood. "Optimizing network performance, automation, and intelligent decision-making through real-time big data analytics." *International Journal of Responsible Artificial Intelligence* 11.8 (2021): 12-22.
29. Gordon, Barbara, Barbara Mason, and Shauna LH Smith. "Leveraging telehealth for delivery of palliative care to remote communities: a rapid review." *Journal of palliative care* 37.2 (2022): 213-225.
30. Huston, Carol J. *Leadership roles and management functions in nursing: theory and application*. Lippincott Williams & Wilkins, 2022.
31. Duran, Huong Tram, and William McIvor. "Simulation Training for Crisis Management: Demonstrating Impact and Value." *Advances in Anesthesia* 39 (2021): 241-257.
32. Kamau, Suleiman, et al. "Integration strategies and models to support transition and adaptation of culturally and linguistically diverse nursing staff into healthcare environments: An umbrella review." *International journal of nursing studies* 136 (2022): 104377.