

The Critical Role of Nurses in Supporting Chronic Disease Patients Amid Crises

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Abstract

Nurses are instrumental in chronic disease management even during the crunches when the healthcare systems are besieged and established patterns of care are dislocated. The present review explores how nurses facilitate the process of care continuity and maintenance of chronic disease patients focusing on their contributions to care coordination, education of patients and provision of psychosocial support. Integration of advanced technologies such as telemedicine, remote supervision and guided interaction by patients has expanded the horizons of nurses' contribution improving both clinical outcomes and patient's satisfaction level. This review also highlights the typical issues encountered by nurses, such as lack of resources and lack of ethics, which require certain level of perseverance and capability to maintain the quality of care in chaotic situations. Recent studies have demonstrated the usefulness of using nurse-led initiatives to decrease the need for hospitalizations, promote self-care activities and improve health outcomes of vulnerable communities. The results of the research indicate the necessity of transplantation into the frameworks of the healthcare new nursing concepts that will provide people with chronic diseases a full comprehensive, fair and viable healthcare anywhere and anytime.

Keywords; Chronic disease, Nurse-led interventions, Telehealth, Patient-centered care, Crisis, Nurses.

Introduction

Historically, nurses were mostly responsible for providing bedside care for acute illnesses; but, as chronic ailments became more common, a wider range of practice was required. Nurses became essential in putting frameworks like the Chronic Care Model into practice as they started to concentrate on long-term management and preventive care. With nurses at the forefront of care coordination and patient empowerment to effectively manage their health, this model places a strong emphasis on health system redesign, decision support, and self-management (Akin, 2020). Nurses' involvement in managing chronic diseases was further strengthened by their inclusion into primary care settings. Nurses took on duties like patient monitoring, education, and care planning when healthcare delivery moved from hospitals to community-based care. This change was especially noticeable in nations like Canada and Australia, where practice nurses emerged as important contributors to the care of chronic diseases. These positions included interacting directly with patients, developing individualized care plans, and encouraging treatment compliance (Lukewich et al., 2014). Similar patterns were seen in the UK, where nurses spearheaded self-management programs to enable patients with chronic diseases to actively participate in their care

(**Macdonald et al., 2008**). The development of multidisciplinary care teams also transformed the nursing role in chronic disease management. Nurses collaborated with physicians, pharmacists, and other healthcare professionals to provide comprehensive care that addressed both medical and psychosocial needs. These coordinated efforts were particularly beneficial for managing complex conditions like diabetes, cardiovascular diseases, and respiratory disorders. Such approaches ensured that critical aspects of care, such as medication management and patient education, were competently delivered by nurses, resulting in improved patient outcomes (**Wagner, 2000**). Training initiatives and specific policies were also part of the effort to improve nurses' involvement in managing chronic illnesses. The "South Australian GP Plus Practice Nurse Initiative" and other initiatives gave nurses the tools and resources they needed to properly treat chronic illnesses. These initiatives demonstrated the value of systemic assistance in removing obstacles such as organizational preparedness and financial constraints, enabling nurses to reach their full potential in the treatment of chronic illnesses (**Fuller et al., 2015**).

A key component of global health policies is the efficient management of chronic illnesses, especially in times of crisis when healthcare institutions are under pressure. In these difficult times, nurses—who make up the largest group of healthcare professionals—have become essential in preserving continuity of treatment and improving patient outcomes. Their crucial responsibilities in utilizing telemedicine, encouraging patient self-management, and negotiating the challenges of crisis-driven healthcare delivery are highlighted by recent studies (**WHO, 2020**). For example, nurse-led interventions utilizing telehealth have proven to enhance clinical outcomes, patient satisfaction, and self-management capacities across diverse populations, including those with cardiovascular and respiratory conditions (**Lee et al., 2022**). Similarly, innovative care models that combine technology and patient-centric education have demonstrated substantial benefits, such as reduced hospital readmissions and improved glycemic control in diabetes management (**Crowley et al., 2022**). These findings illustrate the transformative potential of nurses in enhancing chronic disease care through adaptive and innovative approaches. Furthermore, as demonstrated during the COVID-19 pandemic, nurses' psychosocial care has been essential in reducing the mental health difficulties of patients with chronic illnesses during emergencies. Despite interrupted access to healthcare, their proactive use of virtual platforms and compassionate communication helped patients feel less anxious and empowered to follow their treatment plans (**Podgorica et al., 2022**). When taken as a whole, these initiatives highlight the diverse ways that nurses can meet patients' clinical and emotional requirements when there is systemic stress.

The purpose of this study is to critically explore and emphasize the changing role of nurses in assisting patients with chronic conditions, particularly during crisis situations. It aims to investigate how nurses have modified their practices in response to difficulties such as resource constraints, disruptions in healthcare systems, and an increased reliance on technology.

1. Care coordination and continuity

Managing chronic diseases requires effective care coordination, especially in times of crisis when healthcare systems are under a lot of stress. Emergency situations can interfere with the regular monitoring and individualized therapy required for chronic conditions like diabetes, hypertension, and heart failure (**Ansbro et al., 2022**). As key players in the healthcare industry, nurses use cutting-edge methods like telemedicine to help ensure continuity of care. By facilitating remote patient monitoring, prompt interventions, and improved patient-provider communication, these models help nurses improve patient outcomes (**Bashir and Bastola, 2018**). In the management of chronic diseases, telehealth has become a game-changer. Healthcare practitioners can deliver continuous treatment even in remote or underdeveloped locations by utilizing technology to get

over logistical and geographic obstacles. Significantly fewer emergency visits and better patient outcomes were shown in a Chinese trial that implemented a coordinated telemedicine approach for controlling diabetes and hypertension. This strategy demonstrated the effectiveness of incorporating technology into care coordination by emphasizing consistent monitoring and smooth communication (**Wang et al., 2021**). Such systems highlight how technology-driven care coordination can mitigate the challenges of chronic disease management, especially during crises.

When it comes to using telehealth to enhance the outcomes of chronic diseases, nurse-led interventions have a particularly significant influence. Research has demonstrated that these approaches improve clinical indicators including blood pressure and glucose control, increase patient satisfaction, and improve self-management. When compared to traditional face-to-face care, nurse-led telehealth interventions significantly improved the quality of life for patients with respiratory and cardiac conditions, according to a systematic review and meta-analysis. These initiatives featured regular contact, self-management assistance, and phone follow-ups, all of which enhanced patient outcomes (**Lee et al., 2022**).

Taking care of the needs of vulnerable groups, such those living in rural areas, is another crucial component of care coordination. Chronic illnesses may worsen for persons living in rural areas due to obstacles including restricted access to medical facilities. In these situations, programs that make use of nurse care coordinators and telehealth have been especially successful (**Clarke et al., 2017**). A longitudinal study assessing rural patients with diabetes, hypertension, and congestive heart failure found that consistent reinforcement through coordinated care significantly improved clinical outcomes, including reduced emergency visits and better-controlled A1C levels (**Hansen et al., 2022**). These findings underscore the importance of long-term, tailored interventions in enhancing health equity. The financial burden of healthcare is also addressed by incorporating telemedicine into the management of chronic illnesses. Efficient care coordination streamlines resource use by lowering avoidable readmissions and hospital admissions (**Ezeamii et al., 2024**). For example, a study on a complete telehealth program for individuals with poorly managed diabetes showed significant reductions in diabetes misery and improvements in glycemic control. This program showed how cost-effective it is to deploy comprehensive telehealth interventions by combining medication management, self-management support, and telemonitoring (**Crowley et al., 2022**). Telehealth improves patient empowerment and involvement in addition to clinical results. Patients are better able to manage their diseases when there is direct communication and real-time feedback (**Kvedar et al., 2014**). By incorporating nurse-led telemonitoring systems, patients can take an active role in their care planning, which enhances treatment compliance and promotes patient autonomy (**Davidson et al., 2020**). Because it guarantees continuity of care even in the face of disruptions in conventional healthcare delivery models, this patient-centered approach is especially helpful during emergencies.

Effective care coordination by nurses during crises, such as the COVID-19 pandemic, has proven critical in managing chronic diseases. Nurses have utilized various strategies to adapt to strained healthcare systems and ensure continuous care for patients. Nurses maintained continuity of care for patients with chronic illnesses during lockdowns by putting in place remote monitoring systems and using telehealth platforms to conduct virtual consultations (**Arnaert et al., 2020**). Innovations in digital technologies, which were a crucial component of patient care during the epidemic, significantly aided these efforts (**Sharma et al., 2020**).

By changing their duties to support nursing homes and community care facilities, case management nurses (CMNs) significantly contributed to meeting the rising healthcare needs of vulnerable populations, especially those with chronic diseases (**Molina-Gil et al., 2024**). During

the COVID-19 epidemic, CMNs were essential in modifying their procedures to continue managing chronic illnesses in the face of formidable obstacles. Due to resource limitations, including staffing and medical supply shortages, nurses had to rethink and restructure the way they provided care. To ensure continuity of care in the face of interruptions, they put prioritizing procedures into place to attend to the requirements of the most vulnerable patients, such as those with diabetes, hypertension, and cardiovascular diseases (**Fekadu et al., 2021**). Primary healthcare nurses adapted their practices to ensure the delivery of chronic disease management amidst resource constraints and increased patient demands, highlighting the need for resilient healthcare systems (**Mboweni, 2024**).

2. Patient education and self-management support

Self-management is an essential part of chronic disease care since crises frequently interfere with access to medical services. When it comes to teaching patients about disease management techniques, medication adherence, and lifestyle changes, nurses are essential. Several studies demonstrate how well nurse-led initiatives can enhance patient outcomes in these situations (**Samal et al., 2021**). According to a study, a systematic education program lead by a nurse greatly enhanced medication adherence, dietary changes, and symptom management in rural patients with chronic heart failure, resulting in a 50% reduction in hospital readmission rates (**Cui et al., 2019**). Nurse-led disease management programs for chronic kidney disease have been shown to improve patients' quality of life, particularly in areas like sleep, symptom management, and overall health perception, according to a meta-analysis (**Chen et al., 2016**). According to **Henry et al. (2013)**, nurse-led programs for managing chronic obstructive pulmonary disease (COPD) were linked to better patient outcomes, including decreased dyspnea and increased capacity for self-management. This suggests that customized interventions are effective. A systematic review and meta-analysis confirmed that nurse-led self-management interventions for chronic diseases like diabetes and cardiovascular conditions led to significant reductions in systolic and diastolic blood pressure, as well as improved patient-reported outcomes (**Massimi et al., 2017**). Moreover, according to a mixed-methods study conducted in Australia, nurse-led approaches to the care of chronic conditions such as heart disease and type 2 diabetes were viable, acceptable, and sustainable, showing increased patient satisfaction and self-management (**Eley et al., 2013**). Through organized teaching and care coordination, nurse-led clinics have been demonstrated in thorough evaluations to be successful in lowering hospital admissions, increasing knowledge about specific diseases, and improving patient quality of life (**Chan et al., 2018**). The relevance of nurse-led teaching programs in managing chronic diseases is continuously supported by these findings, particularly in times of crisis when normal access to healthcare may be interrupted. In addition to improving clinical outcomes, these programs increase patient autonomy and resilience by emphasizing personalized counsel and patient empowerment.

Nurses played a critical role in patient education and self-management support for chronic diseases during the COVID-19 pandemic. They emphasized remote consultations and digital tools to ensure continuity of care despite limited in-person interactions (**Heumann et al., 2022**). This approach was essential to mitigate disruptions caused by lockdowns and healthcare reconfigurations (**Ryder et al., 2022**). Nurses used digital platforms to educate and promote health, emphasizing the need of self-management techniques in managing long-term illnesses. These adjustments did, however, highlight certain difficulties, such as unequal access to technology and decreased participation from vulnerable groups (**Doyle et al., 2021**). They also encouraged self-responsibility for medication adherence, symptom monitoring, and healthy lifestyle choices as a result of the pandemic's need for a change toward patient empowerment (**Ghotbi et al., 2021**). To get beyond

obstacles to traditional care delivery, these initiatives were supported by organized virtual education programs (Ryder et al., 2022).

3. Emotional and psychosocial support

Particularly in times of international crisis, nurses are essential in providing patients with chronic illnesses with emotional and psychosocial assistance. People who are managing chronic diseases frequently experience increased stress and anxiety due to the difficulties presented by pandemics, natural disasters, and other major catastrophes. The emotional and psychosocial support provided by nurses is indispensable for patients with chronic diseases during global crises. Their empathetic communication, facilitation of peer support, coordination of care, and educational interventions address the multifaceted challenges faced by these patients. The significance of the nurse-patient connection is highlighted by these crises, which interfere with usual care and increase patients' uncertainty (Jonikas et al., 2021). In addition to provide medical care, nurses often serve as advocates and counselors, using techniques to help patients become more resilient and less afraid. A key component of this supportive function is their capacity to build therapeutic connections, which promote open conversation and trust in a setting of increased vulnerability. Nurses not only provide medical care but also act as advocates and counselors, employing strategies that mitigate patients' fears and enhance their resilience. Their ability to establish therapeutic relationships is a cornerstone of this supportive role, fostering trust and open communication in an environment of heightened vulnerability (Aznar-Huerta et al., 2021). Nurses can better comprehend patients' individual experiences and adjust their interventions by using active listening strategies. It has been demonstrated that compassion and empathy lower anxiety and give patients a sense of emotional security. In times of global crises, when fear and isolation are common, this link is especially important. By lowering stress-related difficulties, nurses' capacity to reassure and comprehend patients is essential in easing their emotional anguish, which can then improve their physical health (Dal Santo, 2021). Nurse-led group-based therapies have been shown to be successful in giving patients with chronic illnesses psychosocial assistance. By giving patients the chance to interact with individuals going through comparable struggles, these therapies promote understanding and a sense of camaraderie. These group environments provide forums for sharing coping mechanisms and useful guidance in addition to facilitating emotional expression. Group interventions can be modified for virtual formats during emergencies, guaranteeing support continuity. By planning and facilitating these groups, nurses guarantee a controlled, therapeutic setting that meets participants' emotional and informational needs (Niño de Guzmán Quispe et al., 2022).

Helping patients navigate the healthcare system in times of crisis is another crucial aspect of the psychosocial support that nurses offer. Healthcare services are frequently disrupted by global events, which adds to the stress of those with chronic illnesses. By coordinating care, informing patients of service availability, and fighting for patients' access to necessary therapies, nurses assist in closing these gaps. In order to reduce patients' sense of powerlessness and guarantee that their treatment plans remain consistent, this assistance is crucial. In an otherwise chaotic setting, nurses provide stability by helping patients navigate these difficulties (Holmen et al., 2020). Addressing the social determinants of health, which frequently make it more difficult for individuals with chronic illnesses to cope with crises, is another aspect of psychosocial support. Nurses evaluate and address the socioeconomic and environmental needs of their patients, such as social support systems, availability to wholesome food, and stable housing. The ability of patients to properly manage their diseases is closely related to these criteria. Nurses assist in reducing some of the more general stressors that can impair health outcomes by putting patients in touch with community resources and support services (Hirschey et al., 2021).

Another way that nurses might offer emotional and psychosocial support is through educational interventions. Anxiety can be decreased and people can take charge of their health with the help of knowledge (**Ricci et al., 2022**). During crises, nurses provide individualized instruction on managing chronic diseases, including guidance on coping mechanisms, lifestyle changes, and medication adherence. These therapies aid in debunking myths and give sufferers the abilities and self-assurance they need to deal with their situation. Nurses contribute to reducing the psychological impact of international crises by encouraging a sense of agency (**Dailah, 2024**). Supporting family members and caregivers of patients with chronic illnesses is another important function of nurses. Patients' emotional health is frequently impacted by family dynamics, and during emergencies, the stress that caregivers endure can have a domino effect on patients. In order to help caregivers manage their responsibilities and make sure their own mental health needs are met, nurses offer them resources and advice. This all-encompassing strategy improves overall results while acknowledging the interdependence of patients' support networks (**Bennett et al., 2017**).

Healthcare professionals, particularly nurses, were under tremendous pressure during the COVID-19 epidemic to offer patients with chronic illnesses with emotional and psychosocial assistance. In order to guarantee that patients received comprehensive care that addressed their physical and psychological requirements, nurses employed creative ways. They kept in touch with patients on a regular basis to offer emotional support and lessen feelings of loneliness by utilizing communication technologies like telehealth and virtual therapy (**Podgorica et al., 2022**). During the epidemic, developing rapport and trust via sympathetic communication became essential to nurse practice. In addition to explaining the need of preserving treatment adherence in the face of COVID-related difficulties, nurses regularly updated patients on their care plans. Patients felt more at ease, experienced less worry, and had better psychological health as a result of this communication. Research indicates that regular conversations led by nurses greatly reduced patients' stress levels and strengthened their coping strategies (**Rathnayake et al., 2021**). Nurses assisted patients with chronic illnesses in establishing social relationships in addition to providing direct patient support. Understanding the value of a support system, nurses trained family members to offer both practical and emotional help and promoted family involvement in patient care. Even amid strict lockdowns, these initiatives assisted in giving patients a sense of normalcy and community again (**Li et al., 2021**).

Another important area of focus was attending to the mental health requirements of the patients. Nurses referred patients with chronic illnesses to the proper mental health resources after spotting early symptoms of anxiety and sadness. In order to assist patients in managing their stress, they also employed mindfulness exercises, relaxation techniques, and other therapies. The use of such measures had a positive effect on patients' physical and emotional health (**Effendy et al., 2023**). Furthermore, nurses served as advocates for their patients, ensuring access to necessary resources and services. They coordinated with healthcare teams to adjust care plans, addressed barriers to medication adherence, and connected patients with community resources. These comprehensive efforts reinforced the holistic care model, ensuring that both the emotional and psychosocial dimensions of patient care were prioritized (**Clements et al., 2021**).

4. **Adaptation to crisis-driven challenges**

Whether brought on by pandemics or natural catastrophes, crises frequently call for quick adjustments to resource constraints and changing healthcare needs. Nurses are essential in addressing the particular difficulties that patients with chronic illnesses experience in these trying times (**Hanefeld et al., 2018**). Patients with chronic illnesses are especially vulnerable during

emergencies because they necessitate constant care and control. Even in the most difficult situations, nurses make sure that the management of chronic diseases is not interrupted by their innovative ways and frontline engagement (**Ricadat et al., 2021**). The construction of temporary clinics amid natural catastrophes is one well-known example. Communities are frequently uprooted, healthcare services are interrupted, and access to necessary drugs and therapies for long-term illnesses like diabetes, high blood pressure, or asthma is impeded by natural disasters. In order to continue providing care, nurses have been known to establish makeshift medical clinics. These temporary clinics act as lifelines, offering emergency care, medicine refills, and routine monitoring. Research shows that these initiatives have helped individuals with chronic illnesses who were moved during emergencies to experience less negative health outcomes (**Craig & Edwards, 1983**).

Another level of complexity is introduced by economic crises, which are marked by increased financial instability. The cost of prescription drugs and regular care is frequently more difficult for patients with chronic illnesses to afford. As advocates for affordable treatment alternatives, nurses assist patients in overcoming these obstacles. For example, they frequently find generic drugs, work with social services, or put patients in touch with programs that offer subsidized medical treatment. According to research, nurse-led programs during economic downturns have greatly increased medication compliance and decreased avoidable hospitalizations for patients with chronic illnesses (**Wilson et al., 2012**). One notable instance of how nurses responded to a previously unheard-of healthcare emergency to assist patients with chronic illnesses is the COVID-19 pandemic (**Kim & Kim, 2021**). Patients with chronic illnesses are at higher risk as a result of routine care being disturbed by social distancing measures and overburdened healthcare systems (**Sumner et al., 2022**). Through remote monitoring, virtual consultations, and digital health education, nurses quickly incorporated telehealth technologies into their practice, guaranteeing continuity of treatment. Research has shown that during the pandemic, nurse-led telemedicine treatments improved patient outcomes and decreased ER visits (**Head et al., 2013**). Additionally, nurses play a key role in creating community-based treatments to fill in care gaps. Access to centralized medical facilities may be restricted during emergencies. In response, nurses frequently oversee home visits, mobile health units, and community outreach initiatives designed specifically for patients with chronic illnesses. These initiatives support health fairness, avoid problems, and guarantee continuity of care, especially for underserved groups. The benefit of nurse-led community outreach in enhancing the outcomes of chronic diseases is demonstrated by evidence from post-disaster situations (**Akin, 2020**).

The lack of resources during emergencies emphasizes nurses' resourcefulness even more. They usually make the most of scarce resources to give patients with chronic illnesses priority care. Examples include creative use of medical equipment and novel approaches to medication management, such as dose splitting or alternative therapy. According to studies, nurses' efforts to optimize resources have proved crucial in preserving patient stability in times of resource scarcity (**Kuşcu Karatepe et al., 2020**). Another essential component of nursing practice in crisis situations is collaboration. In order to create complete treatment plans for patients with chronic illnesses, nurses frequently collaborate with multidisciplinary teams that include doctors, social workers, and public health representatives. During emergencies, this cooperative approach guarantees that care is comprehensive and adapted to patients' changing needs. Research indicates that when nurses lead or coordinate these interdisciplinary efforts, patients with chronic illnesses receive better care results (**Bendowska & Baum, 2023**).

Nurses now face hitherto unheard-of difficulties as a result of the COVID-19 epidemic, particularly when it comes to caring for patients with chronic illnesses (**Mboweni, 2024**). Using

technology, such as telemedicine, to offer remote consultations for the management of chronic diseases was a significant adaptation. While lowering exposure hazards, these technologies enabled nurses to keep an eye on patient conditions **(Rathnayake et al., 2021)**. Additionally, the impact of fewer in-person visits was lessened by patient education delivered via virtual platforms, which enabled patients to effectively self-manage their diseases. In spite of physical obstacles, multidisciplinary teams were able to collaborate thanks to modern technologies, guaranteeing the provision of comprehensive care **(Podgorica et al., 2022)**. Ethical challenges also emerged as a significant concern for nurses managing patients with chronic diseases during the pandemic. They faced dilemmas related to resource allocation, prioritization of care, and maintaining professional ethics under constrained conditions **(Jia et al., 2020)**. Efforts to address these challenges included developing protocols and providing training on ethical decision-making and disaster management **(Gab Allah, 2021)**.

Nurses swiftly adopted technology like telemedicine and mobile health apps to guarantee continuity of service. Despite fewer in-person encounters, these platforms made it possible for patients to receive regular monitoring, consultation, and education, ensuring that they could effectively manage their diseases **(Podgorica et al., 2022)**. During lockdowns and limitations, nurses used digital tools to bridge the gap between patients and healthcare professionals by facilitating normal check-ups and offering emotional support. Another important area in which nurses were crucial was education. By offering advice on medication adherence, lifestyle modifications, and symptom tracking, they aimed to enable patients to self-manage chronic diseases. During the pandemic, individualized virtual instructional sessions became a vital component of nursing practice. These initiatives decreased avoidable problems and greatly enhanced patients' comprehension of their health **(Rathnayake et al., 2021)**. Along with utilizing education and technology, nurses also assisted in interdisciplinary care coordination. In order to create comprehensive care plans that addressed the particular difficulties presented by the pandemic, they collaborated closely with doctors, social workers, and other medical specialists. Through this partnership, patients with chronic illnesses were guaranteed comprehensive care, which included modifying treatment regimens as needed to account for pandemic-related obstacles **(González-Gil et al., 2021)**. Another vital role nurses fulfilled was in medication management and ensuring continuity of prescriptions. They coordinated with pharmacies to secure timely medication refills, provided virtual consultations to address any concerns regarding treatment adherence, and ensured patients understood potential interactions with other COVID-related treatments. This proactive approach helped prevent lapses in critical medication regimens **(Gab Allah, 2021)**.

Lastly, nurses were crucial in providing patients with chronic illnesses with emotional and psychological care. The epidemic caused increased worry and anxiety in many patients, which may have made their diseases worse. In addition to linking patients to mental health providers and offering emotional support and counseling, nurses also helped patients feel secure and stable. This all-encompassing strategy emphasized the value of nurses as advocates for their patients' general well-being in addition to their role as healthcare professionals **(Hu et al., 2020)**.

5. Policy advocacy and leadership

Nurses also play a crucial role in shaping healthcare policies to better address the needs of chronic disease patients during crises. By participating in policy discussions and contributing to the development of crisis management frameworks, nurses help ensure that the healthcare system is equipped to provide equitable and accessible care **(Yodsuban et al., 2023; Azar, 2021)**. A review by **Akbar et al. (2022)** highlighted instances where nurse leaders influenced public health policies

to prioritize chronic disease management during the COVID-19 pandemic, underscoring their impact on systemic resilience. The active involvement of nurses in combining systemic changes with chronic illness care is highlighted by research. Research has demonstrated that philosophical approaches like those based on Foucault can improve the delivery of integrated care, as demonstrated by studies like one that examined the roles of nurses in localized care frameworks (**Turnbull & Reich, 2022**). The efficacy of nurse-driven policy reforms is further supported by the success of nurse-led telehealth treatments in enhancing patient outcomes and self-management for a range of chronic conditions (**Lee et al., 2022**). Systemic obstacles like insufficient funding and training make it even harder for nurses to advocate for policies. By simplifying care procedures for chronic illnesses, nurse case managers can greatly improve patient outcomes, according to studies on their role (**Doménech-Briz et al., 2020**). Research emphasizing the value of teaching nurses crisis management and care advocacy also supports the necessity for education and systemic support (**Meneses-la-Riva et al., 2023**). The contributions of nurses also include influencing government legislation and public attitudes about health emergencies. For example, their ability to innovate and adapt in care delivery frameworks is further demonstrated by their participation in advancing telemedicine solutions during the pandemic (**Fernandez et al., 2020**).

Conclusion

Nurses play a vital role in managing chronic diseases during emergencies, excelling in care coordination, patient education, and emotional support, particularly under systemic stress like the COVID-19 pandemic. Their use of telehealth, innovative care models, and patient-focused approaches has significantly improved care quality and clinical outcomes. Despite challenges such as resource shortages and ethical dilemmas, nurses have demonstrated resilience and adaptability, ensuring continued care for chronic disease patients. Bridging systemic gaps requires enhanced support for nurse-led initiatives, leveraging technology, policy advocacy, and training. As essential healthcare professionals, nurses remain pivotal to shaping equitable, effective, and transformative healthcare systems.

References

- Akbar, M.A., Juniarti, N. and Yamin, A., 2022. The roles of community health nurses' in covid-19 management in Indonesia: a qualitative study. *International journal of community based nursing and midwifery*, 10(2), p.96.
- Akin, S., 2020. Nursing contribution to chronic disease management. *Scripta Scientifica Salutis Publicae*, 6(1), pp.7-13.
- Ansbro, É., Issa, R., Willis, R., Blanchet, K., Perel, P. and Roberts, B., 2022. Chronic NCD care in crises: a qualitative study of global experts' perspectives on models of care for hypertension and diabetes in humanitarian settings. *Journal of migration and health*, 5, p.100094.
- Arnaert, A., Ahmad, H., Mohamed, S., Hudson, E., Craciunas, S., Girard, A., Debe, Z., Dantica, J.L., Denoncourt, C. and Côté-Leblanc, G., 2022. Experiences of patients with chronic obstructive pulmonary disease receiving integrated telehealth nursing services during COVID-19 lockdown. *BMC nursing*, 21(1), p.205.
- Azar, K.M., 2021. The evolving role of nurse leadership in the fight for health equity. *Nurse leader*, 19(6), pp.571-575.
- Aznar-Huerta, A., Cardó Vila, G., Vives Abril, T., Valera Fernández, M.R., Leyva Moral, J.M. and Moreno Poyato, A.R., 2021. Unconditional acceptance in the nurse-patient therapeutic relationship as a whole: An exploratory qualitative study in the context of

- mental health services. *Revista Española de Enfermería de Salud Mental*, 2021, vol. Septiembre 2021, num. 14, p. 22-29.
- Bashir, A. and Bastola, D.R., 2018. Perspectives of nurses toward telehealth efficacy and quality of health care: pilot study. *JMIR medical informatics*, 6(2), p.e9080.
- Bendowska, A. and Baum, E., 2023. The significance of cooperation in interdisciplinary health care teams as perceived by polish medical students. *International journal of environmental research and public health*, 20(2), p.954.
- Bennett, P.N., Wang, W., Moore, M. and Nagle, C., 2017. Care partner: A concept analysis. *Nursing outlook*, 65(2), pp.184-194.
- Catton, H., 2023. Nursing our planet. *International Nursing Review*, 70(1), pp.7-9.
- Chan, H.Y.L., Ng, J.S.C., Chan, K.S., Ko, P.S., Leung, D.Y.P., Chan, C.W.H., Chan, L.N., Lee, I.F.K. and Lee, D.T.F., 2018. Effects of a nurse-led post-discharge advance care planning programme for community-dwelling patients nearing the end of life and their family members: A randomised controlled trial. *International journal of nursing studies*, 87, pp.26-33.
- Chen, C.C., Chen, Y., Liu, X., Wen, Y., Ma, D.Y., Huang, Y.Y., Pu, L., Diao, Y.S. and Yang, K., 2016. The efficacy of a nurse-led disease management program in improving the quality of life for patients with chronic kidney disease: a meta-analysis. *PLoS One*, 11(5), p.e0155890.
- Clarke, J.L., Bourn, S., Skoufalos, A., Beck, E.H. and Castillo, D.J., 2017. An innovative approach to health care delivery for patients with chronic conditions. *Population health management*, 20(1), pp.23-30.
- Clements, C., Barsamian, J., Burnham, N., Cruz, C., Darcy, A.M.G., Duphiney, L., FitzGerald, J., Holland, S., Joyce, C. and DeSanto-Madeya, S., 2021. Supporting frontline staff during the COVID-19 pandemic. *AJN The American Journal of Nursing*, 121(9), pp.46-55.
- Craig, H.M. and Edwards, J.E., 1983. Adaptation in chronic illness: An eclectic model for nurses. *Journal of Advanced Nursing*, 8(5), pp.397-404.
- Crowley, M.J., Tarkington, P.E., Bosworth, H.B., Jeffreys, A.S., Coffman, C.J., Maciejewski, M.L., Steinhauer, K., Smith, V.A., Dar, M.S., Fredrickson, S.K. and Mundy, A.C., 2022. Effect of a comprehensive telehealth intervention vs telemonitoring and care coordination in patients with persistently poor type 2 diabetes control: a randomized clinical trial. *JAMA internal medicine*, 182(9), pp.943-952.
- Cui XiaoNing, C.X., Zhou XiaoZhi, Z.X., Ma LongLe, M.L., Sun TongWen, S.T., Bishop, L., Gardiner, F.W. and Wang Lexin, W.L., 2019. A nurse-led structured education program improves self-management skills and reduces hospital readmissions in patients with chronic heart failure: a randomized and controlled trial in China.
- Dailah, H.G., 2024, January. The Influence of Nurse-Led Interventions on Diseases Management in Patients with Diabetes Mellitus: A Narrative Review. In *Healthcare* (Vol. 12, No. 3, p. 352). MDPI.
- Dal Santo, L., 2012. Nurse-patient emotional interaction in quality of work life. The role of empathy and emotional dissonance.
- Davidson, R., Barrett, D.I., Rixon, L. and Newman, S., 2020. How the integration of telehealth and coordinated care approaches impact health care service organization structure and ethos: Mixed methods study. *JMIR nursing*, 3(1), p.e20282.
- Doménech-Briz, V., Gómez Romero, R., de Miguel-Montoya, I., Juárez-Vela, R., Martínez-Riera, J.R., Mármol-López, M.I., Verdeguer-Gómez, M.V., Sánchez-Rodríguez, Á. and Gea-Caballero, V., 2020. Results of nurse case management in primary health care: bibliographic review. *International journal of environmental research and public health*, 17(24), p.9541.

- Doyle, J., Murphy, E., Gavin, S., Pascale, A., Deparis, S., Tommasi, P., Smith, S., Hannigan, C., Sillevs Smitt, M., Van Leeuwen, C. and Lastra, J., 2021. A digital platform to support self-management of multiple chronic conditions (ProACT): findings in relation to engagement during a one-year proof-of-concept trial. *Journal of medical Internet research*, 23(12), p.e22672.
- Effendy, C., Margaretha, S.E.P.M., Helmi, M., Ferhonika, A. and Masdar, M., 2023. The relationship between social support, fear, and psychological distress among frontline nurses during the COVID-19 pandemic in Indonesia. *Journal of Psychosocial Nursing and Mental Health Services*, 61(5), pp.53-58.
- Eley, D.S., Patterson, E., Young, J., Fahey, P.P., Del Mar, C.B., Hegney, D.G., Synnott, R.L., Mahomed, R., Baker, P.G. and Scuffham, P.A., 2013. Outcomes and opportunities: a nurse-led model of chronic disease management in Australian general practice. *Australian journal of primary health*, 19(2), pp.150-158.
- Ezeamii, V.C., Okobi, O.E., Wambai-Sani, H., Perera, G.S., Zaynieva, S., Okonkwo, C.C., Ohaiba, M.M., William-Enemali, P.C., Obodo, O.R. and Obiefuna, N.G., 2024. Revolutionizing healthcare: how telemedicine is improving patient outcomes and expanding access to care. *Cureus*, 16(7), p.e63881.
- Fekadu, G., Bekele, F., Tolossa, T., Fetensa, G., Turi, E., Getachew, M., Abdisa, E., Assefa, L., Afeta, M., Demisew, W. and Dugassa, D., 2021. Impact of COVID-19 pandemic on chronic diseases care follow-up and current perspectives in low resource settings: a narrative review. *International journal of physiology, pathophysiology and pharmacology*, 13(3), p.86.
- Fernandez, R., Lord, H., Halcomb, E., Moxham, L., Middleton, R., Alananzeh, I. and Ellwood, L., 2020. Implications for COVID-19: A systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic. *International journal of nursing studies*, 111, p.103637.
- Fuller, J., Koehne, K., Verrall, C.C., Szabo, N., Bollen, C. and Parker, S., 2015. Building chronic disease management capacity in general practice: the south Australian GP plus practice nurse initiative. *Collegian*, 22(2), pp.191-197.
- Gab Allah, A.R., 2021, July. Challenges facing nurse managers during and beyond COVID-19 pandemic in relation to perceived organizational support. In *Nursing Forum* (Vol. 56, No. 3, pp. 539-549).
- Gab Allah, A.R., 2021, July. Challenges facing nurse managers during and beyond COVID-19 pandemic in relation to perceived organizational support. In *Nursing Forum* (Vol. 56, No. 3, pp. 539-549).
- Ghotbi, T., Salami, J., Kalteh, E.A. and Ghelichi-Ghojogh, M., 2022. Self-management of patients with chronic diseases during COVID19: A narrative review. *Journal of preventive medicine and hygiene*, 62(4), p.E814.
- González-Gil, M.T., González-Blázquez, C., Parro-Moreno, A.I., Pedraz-Marcos, A., Palmar-Santos, A., Otero-García, L., Navarta-Sánchez, M.V., Alcolea-Cosín, M.T., Argüello-López, M.T., Canalejas-Pérez, C. and Carrillo-Camacho, M.E., 2021. Nurses' perceptions and demands regarding COVID-19 care delivery in critical care units and hospital emergency services. *Intensive and Critical Care Nursing*, 62, p.102966.
- Hanefeld, J., Mayhew, S., Legido-Quigley, H., Martineau, F., Karanikolos, M., Blanchet, K., Liverani, M., Yei Mokuwa, E., McKay, G. and Balabanova, D., 2018. Towards an understanding of resilience: responding to health systems shocks. *Health policy and planning*, 33(3), pp.355-367.

- Hansen, A.R., McLendon, S.F. and Rochani, H., 2022. Care coordination for rural residents with chronic disease: Predictors of improved outcomes. *Public Health Nursing*, 39(4), pp.760-769.
- Henry, P.C.L., Man, C.S. and Fung, Y.S., 2013. Effectiveness of nurse-led disease management programs on health outcomes and health service utilization in adult patients with chronic obstructive pulmonary disease: A systematic review protocol. *JBI Evidence Synthesis*, 11(1), pp.307-328.
- Heumann, M., Zabaleta-del-Olmo, E., Röhnsch, G. and Hämel, K., 2022, December. "Talking on the Phone Is Very Cold"—Primary Health Care Nurses' Approach to Enabling Patient Participation in the Context of Chronic Diseases during the COVID-19 Pandemic. In *Healthcare* (Vol. 10, No. 12, p. 2436). MDPI.
- Hirschev, R., Tan, K.R., Petermann, V.M. and Bryant, A.L., 2021. Healthy lifestyle behaviors: Nursing considerations for social determinants of health. *Clinical journal of oncology nursing*, 25(5), p.42.
- Holmen, H., Larsen, M.H., Sallinen, M.H., Thoresen, L., Ahlsen, B., Andersen, M.H., Borge, C.R., Eik, H., Wahl, A.K. and Mengshoel, A.M., 2020. Working with patients suffering from chronic diseases can be a balancing act for health care professionals—a meta-synthesis of qualitative studies. *BMC Health Services Research*, 20, pp.1-16.
- Hu, D., Kong, Y., Li, W., Han, Q., Zhang, X., Zhu, L.X., Wan, S.W., Liu, Z., Shen, Q., Yang, J. and He, H.G., 2020. Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: A large-scale cross-sectional study. *EClinicalMedicine*, 24.
- Jia, Y., Chen, O., Xiao, Z., Xiao, J., Bian, J. and Jia, H., 2021. Nurses' ethical challenges caring for people with COVID-19: a qualitative study. *Nursing ethics*, 28(1), pp.33-45.
- Jonikas, J.A., Cook, J.A., Swarbrick, M., Nemec, P., Steigman, P.J., Boss, K.A. and Brice Jr, G.H., 2021. The impact of the COVID-19 pandemic on the mental health and daily life of adults with behavioral health disorders. *Translational behavioral medicine*, 11(5), pp.1162-1171.
- Kim, J. and Kim, S., 2021. Nurses' adaptations in caring for COVID-19 patients: A grounded theory study. *International journal of environmental research and public health*, 18(19), p.10141.
- Kuşcu Karatepe, H., Atik, D. and Özcan Yüce, U., 2020. Adaptation With the Chronic Disease and Expectations from Nurse. *Journal of Clinical Practice and Research*, 42(1), p.18.
- Kvedar, J., Coye, M.J. and Everett, W., 2014. Connected health: a review of technologies and strategies to improve patient care with telemedicine and telehealth. *Health affairs*, 33(2), pp.194-199.
- Lee, A.Y.L., Wong, A.K.C., Hung, T.T.M., Yan, J. and Yang, S., 2022. Nurse-led telehealth intervention for rehabilitation (telerehabilitation) among community-dwelling patients with chronic diseases: systematic review and meta-analysis. *Journal of medical Internet research*, 24(11), p.e40364.
- Lee, A.Y.L., Wong, A.K.C., Hung, T.T.M., Yan, J. and Yang, S., 2022. Nurse-led telehealth intervention for rehabilitation (telerehabilitation) among community-dwelling patients with chronic diseases: systematic review and meta-analysis. *Journal of medical Internet research*, 24(11), p.e40364.
- Li, Z., Ge, J., Feng, J., Jiang, R., Zhou, Q., Xu, X., Pan, Y., Liu, S., Gui, B., Wang, Z. and Zhu, B., 2021. Less social support for patients with COVID-19: Comparison with the experience of nurses. *Frontiers in Psychiatry*, 12, p.554435.

- Lukewich, J., Edge, D.S., VanDenKerkhof, E. and Tranmer, J., 2014. Nursing contributions to chronic disease management in primary care. *JONA: The Journal of Nursing Administration*, 44(2), pp.103-110.
- Macdonald, W., Rogers, A., Blakeman, T. and Bower, P., 2008. Practice nurses and the facilitation of self-management in primary care. *Journal of advanced nursing*, 62(2), pp.191-199.
- Massimi, A., De Vito, C., Brufola, I., Corsaro, A., Marzuillo, C., Migliara, G., Rega, M.L., Ricciardi, W., Villari, P. and Damiani, G., 2017. Are community-based nurse-led self-management support interventions effective in chronic patients? Results of a systematic review and meta-analysis. *PloS one*, 12(3), p.e0173617.
- Mboweni, S.H., 2024. Primary healthcare nurses' experiences in managing chronic diseases during COVID-19 in the North West province. *African Journal of Primary Health Care & Family Medicine*, 16(1), pp.1-4.
- Mboweni, S.H., 2024. Primary healthcare nurses' experiences in managing chronic diseases during COVID-19 in the North West province. *African Journal of Primary Health Care & Family Medicine*, 16(1), pp.1-4.
- Meneses-La-Riva, M.E., Fernández-Bedoya, V.H., Suyo-Vega, J.A., Grijalva-Salazar, R.V., Ocupa-Cabrera, H.G., Alvarado-Suyo, S.A. and Ocupa-Meneses, G.D.D., 2024. Lessons learned during the health crisis caused by COVID-19 in the work of the nursing professional: A systematic review. *F1000Research*, 12, p.777.
- Molina-Gil, M.J., Guerra-Martín, M.D. and Diego-Cordero, R.D., 2024. Primary Health Care Case-Management Nurses during the COVID-19 Pandemic: A Qualitative Study. *Nursing Reports*, 14(2), pp.1119-1128.
- Niño de Guzmán Quispe, E., Martínez García, L., Orrego Villagrán, C., Heijmans, M., Sunol, R., Fraile-Navarro, D., Pérez-Bracchiglione, J., Ninov, L., Salas-Gama, K., Viteri García, A. and Alonso-Coello, P., 2021. The perspectives of patients with chronic diseases and their caregivers on self-management interventions: a scoping review of reviews. *The Patient-Patient-Centered Outcomes Research*, 14, pp.719-740.
- Podgorica, N., Zenzmaier, C., Rungg, C., Bertini, B. and Perkhofer, S., 2022. Facing the unknown COVID-19 pandemic: A qualitative study with nurses and nursing assistants in three European countries. *Frontiers in Public Health*, 10, p.985702.
- Podgorica, N., Zenzmaier, C., Rungg, C., Bertini, B. and Perkhofer, S., 2022. Facing the unknown COVID-19 pandemic: A qualitative study with nurses and nursing assistants in three European countries. *Frontiers in Public Health*, 10, p.985702.
- Podgorica, N., Zenzmaier, C., Rungg, C., Bertini, B. and Perkhofer, S., 2022. Facing the unknown COVID-19 pandemic: A qualitative study with nurses and nursing assistants in three European countries. *Frontiers in Public Health*, 10, p.985702.
- Rathnayake, S., Dasanayake, D., Maithreepala, S.D., Ekanayake, R. and Basnayake, P.L., 2021. Nurses' perspectives of taking care of patients with Coronavirus disease 2019: A phenomenological study. *Plos one*, 16(9), p.e0257064.
- Rathnayake, S., Dasanayake, D., Maithreepala, S.D., Ekanayake, R. and Basnayake, P.L., 2021. Nurses' perspectives of taking care of patients with Coronavirus disease 2019: A phenomenological study. *Plos one*, 16(9), p.e0257064.
- Rathnayake, S., Dasanayake, D., Maithreepala, S.D., Ekanayake, R. and Basnayake, P.L., 2021. Nurses' perspectives of taking care of patients with Coronavirus disease 2019: A phenomenological study. *Plos one*, 16(9), p.e0257064.
- Ricadat, É., Béliard, A., Citrini, M., Craus, Y., Gabarro, C., Mamzer, M.F., Marques, A., Sannié, T., Teixeira, M., Tocilovac, M. and Velpry, L., 2021. COVID-19 health crisis and chronic illness: Protocol for a qualitative study. *JMIR Research Protocols*, 10(9), p.e28728.

- Ricci, L., Villegente, J., Loyal, D., Ayav, C., Kivits, J. and Rat, A.C., 2022. Tailored patient therapeutic educational interventions: A patient-centred communication model. *Health Expectations*, 25(1), pp.276-289.
- Ryder, M., Guerin, S., Forde, R., Lowe, G., Jaarsma, T., O'Neill, M., Halley, C. and Connolly, M., 2023. The perceived effects of COVID-19 while living with a chronic illness. *Journal of Nursing Scholarship*, 55(1), pp.154-162.
- Samal, L., Fu, H.N., Camara, D.S., Wang, J., Bierman, A.S. and Dorr, D.A., 2021. Health information technology to improve care for people with multiple chronic conditions. *Health services research*, 56, pp.1006-1036.
- Sharma, R., Vishwas, A.S. and Jelly, P., 2020. Impact of COVID-19: nursing perspective and concern. *Int J Community Med Public Heal*, 7(11), pp.4648-4652.
- Sumner, J., Bundele, A., Chong, L.S., Teng, G.G., Kowitlawakul, Y. and Mukhopadhyay, A., 2022. Continuing chronic care services during a pandemic: results of a mixed-method study. *BMC Health Services Research*, 22(1), p.1009.
- Turnbull, D.M. and Reich, A., 2023. Using Foucault to (re) think localisation in chronic disease care: Insights for nursing practice. *Nursing Philosophy*, 24(1), p.e12392.
- Wagner, E.H., 2000. The role of patient care teams in chronic disease management. *Bmj*, 320(7234), pp.569-572.
- Wang, Z., An, J., Lin, H., Zhou, J., Liu, F., Chen, J., Duan, H. and Deng, N., 2021. Pathway-driven coordinated telehealth system for management of patients with single or multiple chronic diseases in China: system development and retrospective study. *JMIR Medical Informatics*, 9(5), p.e27228.
- WHO (World Health Organization), 2020. Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020 (No. WHO/2019-nCoV/EHS_continuity/survey/2020.1). World Health Organization.
- Wilson, P.M., Brooks, F., Procter, S. and Kendall, S., 2012. The nursing contribution to chronic disease management: a case of public expectation? Qualitative findings from a multiple case study design in England and Wales. *International journal of nursing studies*, 49(1), pp.2-14.
- Yodsuban, P., Pengpid, S., Amornchai, R., Siripoon, P., Kasemsuk, W. and Buasai, N., 2023. The roles of community health nurses for older adults during the COVID-19 pandemic in Northeastern Thailand: a qualitative study. *International journal of nursing sciences*, 10(1), pp.53-63.