

Review Article

Effect of COVID-19 on chronic care management in primary health settings

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ABSTRACT

The COVID-19 outbreak has brought changes to the management of conditions in primary healthcare settings, leading to a reassessment of current practices and the adoption of innovative approaches. This article examines the symptoms and treatment methods that have emerged in response to the challenges posed by the pandemic. We explore how disruptions in care for people with illnesses and the complex relationship between chronic diseases and COVID-19 severity have influenced healthcare delivery. Additionally, we discuss the increased reliance on telehealth services, which have been crucial in ensuring patient care but have also revealed disparities in access and digital literacy. The need for a patient-centered approach is emphasized through a reevaluation of care delivery models- heightened attention to psychosocial factors. We also delve into the challenges related to resource allocation adjustments to treatment plans and the psychological impact on patients dealing with diseases. Finally, we highlight opportunities for the management of chronic conditions in the future through better integration of telehealth services and an enhanced focus on patient empowerment and preventive care. As healthcare systems adapt to this evolving landscape, there are lessons from this pandemic that can inform more patient-centric and adaptable strategies for managing chronic conditions.

Keywords: Chronic care management, COVID-19, Telehealth, Patient-centered Care, Healthcare Resilience

INTRODUCTION

The COVID-19 pandemic has had an impact on healthcare systems worldwide, causing a reevaluation of practices and the adoption of innovative approaches to patient care. One

area that has seen changes is Chronic care management (CCM) in healthcare settings.¹⁻³ Conditions like diabetes, cardiovascular diseases, and respiratory illnesses require coordinated care to be effectively managed. Due to the disruptions caused by the healthcare providers have had to

examine how they deliver chronic care services in primary healthcare settings. Initially, the pandemic led to a redirection of resources towards addressing the increasing number of COVID-19 cases.^{4,5}

Consequently, routine and preventive care, including disease management, took a backseat as the urgent need to respond to the pandemic became a priority. Healthcare facilities faced challenges in maintaining care for patients with conditions, resulting in follow-up appointments, medication adherence, and lifestyle management disruptions. As a result, managing conditions within healthcare settings became even more complex than before.^{6,7} Existing literature highlights areas where COVID-19's impact on chronic care management has been particularly evident. Telehealth emerged as a tool for maintaining communication between healthcare providers and patients during lockdowns and social distancing measures. Research has indicated that telehealth interventions have been proven effective in aiding the management of diseases. These interventions serve as a resource for care, especially when face-to-face visits are not possible.^{8,9}

The COVID-19 pandemic has led to the adoption of telehealth, which has implications for the future of managing chronic conditions. This shift offers benefits in terms of improved accessibility, increased patient engagement, and cost-effectiveness. However, implementing telehealth has brought about challenges. We have identified disparities in technology access and digital literacy as barriers to telehealth utilization, especially among vulnerable populations.¹⁰⁻¹² It is essential to address these disparities to ensure that the advantages of telehealth in care management are distributed fairly. Furthermore, healthcare providers had to adapt their practices to care during the pandemic. This required changes in workflows, documentation methods, and the development of communication skills. Beyond this adaptation phase, the COVID-19 crisis prompted a reevaluation of care delivery models for conditions.¹³ One model that has gained renewed attention is integrated care, which involves collaboration among care providers, specialists, and other healthcare professionals. This approach aims to enhance coordination and improve the quality of care management.¹⁴⁻¹⁶

The pandemic highlighted the importance of communication and collaboration between components within the healthcare system. Additionally, models that facilitate information sharing and coordinated care delivery. Such as the Chronic care model. Have proven strategies for navigating complexities introduced by the pandemic. It's also crucial to recognize the emotional aspects involved in managing conditions during this challenging time. People suffering from long-term illnesses experience increased worry and tension due to their concerns about how the virus might affect their well-being and disrupt their healthcare routines. Healthcare professionals have had to adapt their strategies to tackle the difficulties arising from the pandemic. They recognize that

mental and physical well-being are interconnected when managing diseases.

The literature emphasizes the importance of a patient-centered approach, taking into account the aspects of care, especially during times of uncertainty and stress. Ongoing research is being conducted to understand the long-term effects of the pandemic on care management in healthcare settings. While telehealth and integrated care models show promise, there are still questions regarding their sustainability and scalability in the pandemic era. Another concern is how delayed or deferred care during the pandemic may impact outcomes and disease progression. It is crucial to comprehend these long-term implications in order to shape strategies for managing conditions effectively.

Furthermore, the COVID-19 pandemic has significantly altered how chronic care is managed within healthcare settings. The literature highlights themes such as increased use of telehealth services, reevaluation of care delivery models, and greater recognition of aspects related to chronic illnesses. As healthcare systems navigate through these challenges posed by the pandemic, it is important that we learn from this period so that we can develop patient-centered approaches to managing chronic conditions in the years ahead. This review intends to provide an overview of the impact of COVID-19, on chronic care management in primary health settings.

METHODS

On 26 November 2023, we conducted a review of articles from sources such as Cochrane Library, Pubmed, and Scopus. The focus of this review was to analyze how COVID-19 has affected the management of care in health settings. Specifically, we looked at studies conducted in English since 2008 that prioritize understanding the impact of COVID-19 on care. The goal was to gain insights into assessment methods and early warning systems that can help healthcare professionals adapt to the challenges posed by COVID-19 in managing conditions.

DISCUSSION

The COVID-19 pandemic has had an impact on how chronic care is managed in primary healthcare settings. It has disrupted care, complicated the relationship between conditions and COVID-19 severity, raised concerns about respiratory health, and accelerated the use of telehealth. Both patients and healthcare providers face challenges as a result. The pandemic has forced us to think about how we provide care, focusing on approaches to maintain continuity of care, adjust treatment plans and address the psychological aspects of managing chronic diseases. Telehealth has played a role in bridging the gap when in-person visits have been difficult. It has also highlighted disparities, in access and digital literacy. As we rethink how we deliver care and become more aware of the aspects

involved it becomes clear that taking a patient-centered approach is essential.

Clinical manifestation

The impact of the COVID-19, on healthcare has brought changes to how chronic conditions are managed in primary health settings. This has created challenges for both patients and healthcare providers. One major effect is the disruption of care for individuals dealing with illnesses. Due to the focus on fighting COVID-19, non-urgent medical appointments and elective procedures have been and canceled, which directly affects patients managing conditions like diabetes, hypertension and cardiovascular diseases.^{17,18} The delay in checkups raises concerns about worsening conditions and their long term effects on patient outcomes. Additionally, the pandemic has highlighted how underlying health conditions such as diabetes, respiratory disorders, and cardiovascular diseases increase the risk of outcomes in COVID-19 patients. Managing COVID-19 cases becomes more complex when there are existing comorbidities involved alongside illnesses. The respiratory consequences of both COVID 19 and certain chronic illnesses have added to an environment filled with difficulties. Patients who have respiratory diseases, like obstructive pulmonary disease (COPD) or asthma face increased worries about their respiratory health when dealing with a viral respiratory infection.^{19,20}

The symptoms of COVID-19 and respiratory conditions often overlap, including coughing, shortness of breath and chest discomfort. This means that careful clinical assessment is necessary to distinguish between exacerbations of illnesses and potential COVID-19 infection. In healthcare settings the pandemic has accelerated the adoption of telehealth as a tool for maintaining patient care while reducing the risk of virus transmission. Telehealth has become essential for assessing, monitoring and consulting with patients managing conditions. Healthcare providers have quickly adapted to platforms to carry out assessments covering symptoms, medication adherence and lifestyle management.

While telehealth has provided a solution for continuity of care it also presents challenges in assessing certain clinical signs and performing hands on examinations that are vital for chronic conditions requiring physical assessments such as diabetic foot examinations or blood pressure measurements. The psychological impact on patients dealing with illnesses has become prominent during the pandemic. Individuals navigating these long-term health issues often experience heightened anxiety and stress due to uncertainties about their health status disruptions in their care routines and the pervasive fear of contracting COVID-19. The management of diseases now requires an approach, to patient care that takes into account not only their physical well-being but also their emotional health. This holistic approach recognizes the importance of addressing both the physiological aspects of health.

Healthcare providers have found themselves dealing with the effects caused by the situation. They have acknowledged the role of health support, in ensuring the overall well-being of patients with chronic illnesses. Additionally, they have realized the significance of taking preventive measures in managing diseases, as evidenced by delays or deferrals in seeking medical care. Some patients, driven by fear of contracting the virus have chosen to avoid seeking attention for symptoms that are concerning. This has resulted in delayed diagnoses and interventions, which can impact disease progression. Consequently, it has become necessary to find ways to engage and reassure patients about the safety of healthcare facilities.

In summary managing care during the COVID-19 pandemic involves disruptions in care, a complex relationship between chronic conditions and COVID-19 severity, respiratory implications, increased use of telehealth services, and a heightened psychological impact, on patients. It is crucial to understand these manifestations and address them proactively to develop strategies that strengthen the resilience of chronic care management amidst ongoing and future healthcare challenges.

Management

The COVID-19 pandemic has had an impact on how chronic care is managed in primary health settings. Healthcare systems worldwide are facing challenges in managing chronic conditions as they grapple with the far-reaching consequences of the virus. This discussion explores management aspects, including ensuring continuity of care, adapting treatment plans integrating telehealth, and strategically allocating resources. With checkups and elective procedures being postponed due to the virus influence, healthcare providers have had to find innovative solutions.

Taking measures such as rescheduling missed appointments, prioritizing high-risk patients, and exploring alternative care delivery models have proven crucial during these times. Highlighting the significance of keeping an eye on and regularly checking up on patients is crucial to avoid the deterioration of their conditions and minimize any long-term impacts. Dealing with cases during the necessitates adopting a specific strategy for treatment plans.

Currently, healthcare professionals are facing the task of adjusting these plans to tackle the difficulties presented by COVID-19. This requires an evaluation of the pros and cons associated with medications, particularly those that could potentially affect the immune system.^{6,21} Subsequently, healthcare providers must make customized choices to meet each patient's requirements. Furthermore, it is crucial to consider the interactions between treatments for long-term health conditions and emerging therapeutics for COVID-19. This is important to ensure that any negative outcomes are prevented. The COVID-19

pandemic has accelerated the integration of telehealth into healthcare settings as part of managing conditions.

Telehealth has become a tool that enables clinical assessments, patient health status monitoring, and virtual consultations. However, implementing solutions requires consideration to ensure equal access for all, especially vulnerable populations. Healthcare providers need to navigate the challenges of conducting assessments through platforms, particularly when it comes to chronic conditions that typically involve physical examinations. Despite these challenges, the benefits of telehealth in terms of accessibility, minimizing exposure risks and maintaining communication with patients cannot be overstated. Managing care effectively during the pandemic requires the allocation of resources. Healthcare systems must optimize resource utilization to balance the demands of caring for COVID-19 cases while also meeting the needs of individuals with conditions. This optimization includes allocating healthcare staff, diagnostic resources and treatment capacities.

Additionally, it is essential to implement risk stratified approaches that identify and prioritize high-risk patients for interventions. Strategic planning should also account for surges in COVID-19 cases by having contingency measures in place while ensuring that chronic care remains a priority amidst dynamic healthcare demands. Managing patients goes beyond treatments; it involves educating and empowering them. It is crucial to provide information about how COVID-19 intersects with chronic conditions. It is crucial for patients to understand the importance of following their treatment plans, seeking attention for any concerning symptoms and taking preventive measures to lower the risk of infection. Empowering patients to participate in their healthcare actively promotes resilience and improves clinical outcomes. The psychosocial aspects of managing conditions have become more significant during the pandemic.^{22,23}

Healthcare providers now have a role in addressing the increased anxiety and stress experienced by individuals dealing with illnesses. Integrating support into management involves regular mental health check-ins, offering coping resources and adopting a patient-centered approach that considers emotional well-being alongside physical health. Collaborating with health professionals and incorporating health services into chronic care models is crucial for a comprehensive approach to patient care. In managing conditions during the pandemic, adopting preventive care strategies becomes essential. Encouraging vaccinations against diseases like influenza and pneumonia becomes paramount in reducing the risk of complications in individuals with chronic conditions. Furthermore, promoting lifestyle changes that improve health and resilience is a part of comprehensive clinical management.

Utilizing monitoring devices, wearable technology, and digital health platforms can facilitate the management of

chronic conditions and early intervention if there are any deviations from the normal baseline. So, effectively handling long-term health issues in healthcare settings amidst the COVID-19 pandemic requires a flexible strategy. Effectively providing care, adjusting treatment plans, incorporating telehealth services resources, strategically educating patients, offering psychosocial support, and implementing innovative preventive measures are all crucial aspects of this approach. By skillfully navigating these complexities while considering the needs and emotions of patients, healthcare providers can strengthen the management of conditions. Minimize the long-term impact of the pandemic on individuals living with such conditions.

CONCLUSION

In conclusion, the COVID-19 pandemic has forced us to reconsider how we manage care in health settings. We have learned lessons from disruptions in care, the complexities of managing multiple conditions, and the integration of telehealth. As healthcare systems continue to face challenges, it is crucial that we build resilience by combining management, strategic resource allocation, patient education, and psychosocial support. The long-term effects of these changes will shape the future of care, highlighting the need for a patient-centered approach in the post-pandemic era.

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