

Strategies to Manage Long-Term Care Facilities during COVID-19 for Improvements in End-of-life Care a Systematic Literature Review

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Abstract: *The COVID-19 pandemic had a considerable impact on individuals globally. The purpose of this systematic literature review was to determine what successful strategies healthcare leaders used to manage long-term care facilities during the outbreak of the COVID-19 pandemic to improve patient end-of-life care and outcomes. Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines, a detailed search transpired using the academic databases MEDLINE and Cumulative Index of Nursing and Allied Health Literature (CINAHL). Data from 20 relevant articles were analyzed using a process of constant comparing of information, and categorizing statements based on answering the research question. Three themes emerged from the analysis, which included strategies, long-term care, and end-of-life care. The results showed that there were successful strategies that healthcare leaders in long-term care facilities implemented. The findings of this study indicated that innovative strategies aided in more positive outcomes with end-of-life care during the COVID-19 global pandemic. The implication of these findings provides healthcare leaders a better opportunity to implement strategies to increase patient outcomes and positive outcomes for families during end-of-life care.*

Keywords—COVID-19, end-of-life care, long-term care, strategies

1. INTRODUCTION

The year 2020 proved to be a trying time for individuals globally. By September 2020, over 200,000 Coronavirus (COVID-19) related deaths transpired in the United States (Fineberg, 2020). Healthcare facilities in the US were impacted by the pandemic, especially residents in long-term care facilities. Many organizations implemented new policies and procedures to protect their staff and communities (Sinsky and Linzer, 2020). Findings have shown that the elderly population posed a higher risk for exposure and development of the virus when compared to the general population (Thompson, Barbu, Beiu, Popa, Mihai, Berteanu, & Popescu, 2020). Due to high-risk exposure rates in older adults, a mandatory shutdown in long-term care facilities occurred in March 2020. By April of the same year, there were already over 10,000 deaths in long-term care facilities reported (Van Houtven, Boucher, & Dawson, 2020).

During the pandemic, healthcare leaders had to reevaluate how they managed their organizations because employees impacted end-of-life care for long-term care patients. The general issue is that some healthcare leaders could not manage long-term healthcare facilities effectively during the outbreak of COVID-19, which decreased patient end-of-life care and outcomes (Van Houtven, Boucher, & Dawson, 2020). Some enhancements happened during 2020, such as implementing enhanced traffic control bundling into long-term care facilities that proved effective in COVID-19 transmission (Yen, Schwartz, King, Lee, & Hsueh, 2020). However, the problem remains that some healthcare leaders lack

successful strategies to manage long-term care facilities during the COVID-19 pandemic to improve patient end-of-life care and outcomes. The purpose of this systematic literature review is to explore successful strategies used by healthcare leaders to manage long-term healthcare facilities during the COVID-19 pandemic, to improve patient end-of-life care and outcomes.

2. METHODS

A preliminary search through Google Scholar provided an initial base for finding a research topic. The problem, intervention, comparison, and outcomes (PICO) based framework transpired to identify the research question: what successful strategies do healthcare leaders use to manage long-term care facilities during the outbreak of the COVID-19 pandemic to improve patient end-of-life care and outcomes? Following the preferred reporting items for systematic reviews and meta-analysis (PRISMA, 2015) guidelines, an article search of MEDLINE (EBSCO) and CINAHL databases was used.

The use of the academic databases helped to locate articles to help answer the proposed research question. These academic articles were chosen from those in the last five years and relevant to the question. Due to the number of articles produced, an examination of the article's relevance transpired to reduce the articles selected to help answer the research question. While searching for articles using the databases, the terms COVID-19, end-of-life care, long-term care facility, and outcomes were used. Searching key terms to narrow down the search results occurred. When selecting an article for this systematic research analysis project, there were parameters set for the articles. The articles must be

relevant to the topic, between 2016 and 2021, written in English, and from a published peer-reviewed full-text. Each article was specific to the strategy healthcare leaders have used to manage long-term care facilities during the outbreak of the COVID-19 pandemic to improve patient end-of-life care and outcomes.

3. RESULTS

The initial research question was what successful strategies do healthcare leaders use to manage long-term care facilities during the outbreak of the COVID-19 pandemic to improve patient end-of-life care and outcomes? An in-depth literature search and careful review led to the use of two academic research databases. The first academic database was CINAHL, which produced fourteen articles germane to the topic. The second academic database was MEDLINE and produced six articles germane to the topic. A specific method of research was utilized to select articles and for the analysis process of the data (Moher, Liberati, Tetzlaff, & Altman, 2009). The final list of articles was a total of twenty. The articles were searched and determined to be sufficient for data analysis. (See Figure 1). Table 1 lists the titles, their key, and their relevant findings.

The analysis of the 20 academic articles led to key findings of relevant themes within the articles and the number of times in which they occur within the articles. The three most frequent themes that arose from the study of these academic articles were strategies, long-term care, and end-of-life care. All three of these themes pertain to the overall research question; what successful strategies do healthcare leaders use to manage long-term care facilities during the outbreak of the COVID-19 pandemic to improve patient end-of-life care and outcomes? Table 2 demonstrates these findings.

4. DISCUSSION

The purpose of this systematic literature review is to determine what successful strategies healthcare leaders used to manage long-term care facilities during the outbreak of the COVID-19 pandemic to improve patient end-of-life care and outcomes? Twenty articles published between 2016-2021 were utilized in this study. Three themes were then identified from the articles: strategies, long-term care, and end-of-life care. The results of this study indicate that the three themes have a significant impact on the initial research question.

Theme one listed in Table 2 states that 55% of the articles, 1-3, 5-7, 9-10, 14-15, and 20, implied the strategies used to manage the COVID-19 pandemic in long-term healthcare facilities during end-of-life care with patient care. Some strategies included various kinds of interventions, based on their purpose, namely, to increase resident social connections, improve physical fitness, support staff/resident relationships, and promote staff/family communication

(Bowers, Chu, Wu, Yamamoto-Mitani, Mateos, & McGilton, 2021). The COVID-19 pandemic proved to be trying on patients, patient's families, healthcare staff, and healthcare facilities. Implementation of smart technology, necessary personal protective equipment, connections with patients, and refresher training were strategies that were implemented during the pandemic (Nyatanga, 2020). These strategies were important throughout the COVID-19 pandemic to help with patient care.

Theme two shows that 25% of the articles, 3, 6, 8, 18-19, imply that long-term healthcare facilities have been impacted by COVID-19. Eckardt et al. (2020) observed several reports claiming individual deaths transpired because of a COVID-19 outbreak within long-term healthcare facilities. The impact was detrimental to the facilities during the year 2020. Outcomes were high in long-term facilities due to the lack of guides and regulations (Thompson, Barbu, Beiu, Popa, Mihai, Berteanu, & Popescu, 2020). Facilities were impacted significantly by the pandemic. Not only were patients affected, but there was also healthcare staff that was affected. There was an impact throughout the country that led to the implementation of strategies into long-term healthcare facilities.

Theme three, represented by 50% of the articles, 2, 4, 7, 9, 11-13, 16-17, 20, shows the representation of COVID within end-of-life care for patients. The way end-of-life care was delivered to patients had to be altered during the pandemic (Ersek, Smith, Griffin, Carpenter, Feder, Shreve, Nelson, Kinder, Thorpe, & Kutney-Lee, 2021). The way the pandemic affected patient care in long-term care facilities was similar to end-of-life care for patients. During a pandemic, discussions for end-of-life care must be planned and needs to be assessed for the nurses within the facilities (Lewis-Pierre, 2020). The assessments can be crucial aspects in end-of-life care for the staff in the facilities to help with the implementation of successful strategies in facilities.

There were several limitations present in the research of these academic articles. The time frame for which the researchers were able to analyze each article was only twelve weeks. The researchers had a very fundamental working knowledge of the information in which was analyzed. There is a possibility that information retrieved from the articles was misinterpreted and presented to the other researchers incorrectly. Based on the specific search narrowed by keywords and dates, important information could have been neglected in the study and research of the academic articles.

In the attempt to minimize the limitations presented in the study, the PRISMA guidelines were followed. The use of Google Scholar transpired for the identification of a topic and then was narrowed down to articles found on the academic databases MEDLINE (EBSCO) and CINAHL. The articles that met certain criteria were narrowed down to the final 20 articles used for the study. The process of searching and analyzing assisted with preventing the research parameters from being too broad. Despite the limitations of

this study, it was proven that there were successful strategies that were implemented in long-term healthcare facilities.

In future research studies of this topic, it would be beneficial for the researcher to narrow the location of the long-term care facilities to one region of the United States. The lack of research regarding COVID-19 made the narrowing down of statistics more difficult. Including more researchers to cover a larger quantity of articles would improve the validity of the study, which would allow for greater opportunities with articles. Longer time frames to review the articles would ensure the research was accurate.

4.1 Figures and Tables

Figure 1

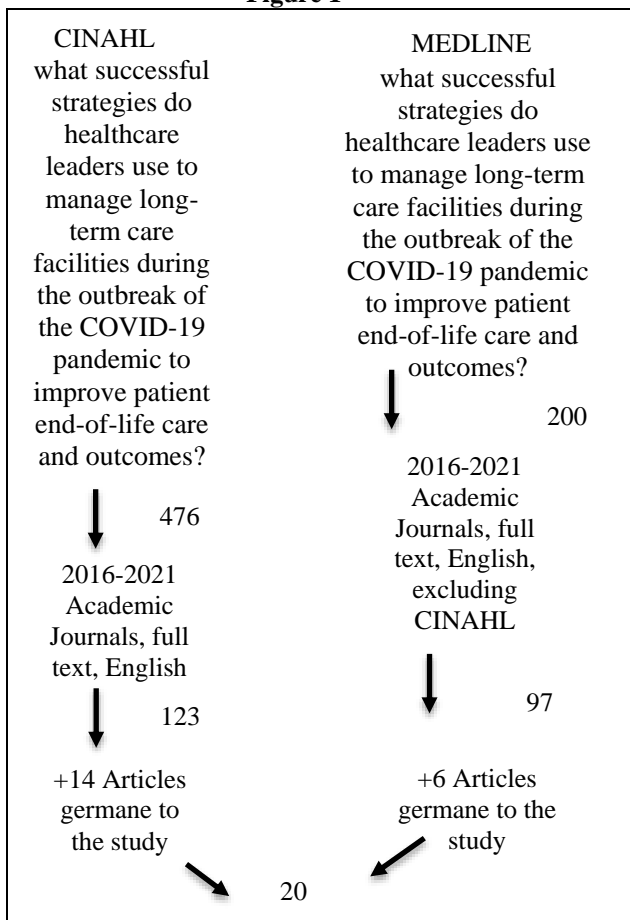


Table 1: Summarized findings of the literature

Title	Findings
ADVANCE CARE PLANNING RE-IMAGINED: A NEEDED SHIFT FOR COVID TIMES AND BEYOND (1)	The changing of discussions and priorities can prove to be beneficial with clinical decisions. The changes in the discussions can help with the shock of the conversation.
End-of-life care	The pandemic allowed for opportunities in

during COVID-19: opportunities and challenges for community nursing (2)

roles in healthcare settings. COVID-19 raised awareness in different settings with nursing roles with implementation the of time set for breaks.

What COVID-19 Innovations Can Teach Us About Improving Quality of Life in Long-Term Care (3)

The implementation of technology innovations improves the emotional standpoint of patients. The innovations improved physical fitness, increased connections, support of relationships between staff and residents, and the promotion of communication between the family and the staff.

The Effects of Nonconventional Palliative and End-of-life Care During COVID-19 Pandemic on Mental Health-Junior Doctors' Perspective (4)

The maintaining of positive attitudes and teamwork boosts morale during a time of uncertainty and sickness. The implementation of strategies helps benefit effective communication.

How the COVID-19 Pandemic Has Affected Hospice Care: Perspective of a Student Volunteer (5)

The implementation of innovative technology services and safety practices happened during the COVID-19 pandemic, but hospice care lacked the ability to implement certain technologies. COVID-19 changed how patients on hospice care have been dying.

Hospital affiliated long term care facility COVID-19 containment strategy by using prevalence testing and infection control best practices (6)

Interventions for infection control were implemented and helped contain the spread of COVID-19 over six weeks. The implementation of the testing protocol proved to be useful during infection control strategies to limit the number of positive cases.

End-of-life Care in the Time of COVID-19: Communication Matters More Than Ever (7)

Effective communication between staff and families has a more positive outcome of ratings for families of the bereaved.

IMPACT OF THE COVID-19 OUTBREAK ON LONG-TERM CARE IN THE UNITED STATES (8)

There needed to be changes made in the strategies due to COVID-19. Regional differences were an impact throughout the United States due to the impact of COVID.

END-OF-LIFE CARE DURING THE COVID-19 PANDEMIC – WHAT MAKES THE

Patients in the ICU during the pandemic should be provided care that is specific to that patient, which is vital during all stays in the ICU but even more so during COVID.

DIFFERENCE? (9)

CONNECTION, COMFORT, AND COVID-19 IN PALLIATIVE CARE (10)
 The implementation of technology opened new experiences for families during the pandemic to see relatives when they could not attend in person.

AVOIDING INEFFECTIVE END-OF-LIFE CARE: A LESS FROM TRIAGE? (11)
 Minimalist policies during triage are beneficial. The policies can save resources in the healthcare organization, and it can save the lives of patients.

END-OF-LIFE CARE DURING THE COVID-19 PANDEMIC: OPPORTUNITIES AND CHALLENGES (12)
 End-of-life care can be address in educational settings in simulation. This allows for learning and nursing skills to be met. The pandemic has had new demands being expected. Patients deserve the best nurses and providers.

PALLIATIVE CARE DELIVERY IN CANCER PATIENTS IN THE ERA OF COVID-19 OUTBREAK: UNIQUE NEEDS, BARRIERS, AND TOOLS FOR SOLUTIONS (13)
 Staff on palliative care being prepared with proper strategies can overcome obstacles that may be present with the pandemic. Having protocols in place for the education of the patient and family members during their trying time is crucial.

COVID-19: ETHICAL CHALLENGES FOR NURSES (14)
 Making sure the nurses have a voice and that voice is heard is crucial for decision-making during the pandemic. Nurses need to reach out for support during this trying time, not only for themselves, but also for their patient's care to be the best.

STRENGTHENING PALLIATIVE CARE IN TODAY'S CHALLENGES (15)
 PPE being high quality is a must. Training for staff in palliative care should be offered for new hires, and a training refresher course is important for the patient's palliative care. The COVID pandemic has transformed palliative care everywhere.

END-OF-LIFE DECISIONS AND CARE IN THE MIDST OF A GLOBAL CORONAVIRUS (COVID-19) PANDEMIC (16)
 Creative ways to speak with patient families to talk during the trying time of the pandemic. The use of telehealth and other video technologies proved useful for providers to talk with the families regarding the patient care being provided.

COVID-19 AND PALLIATIVE CARE (17)
 Asking questions regarding the care for the patient allows for plans to be made by the team that will be taking care of the patient, which is essential during the care process and during the support of the family.

OPTIMIZING COVID-19 SURVEILLANCE IN LONG-TERM CARE (18)
 If facilities increase testing rates and update the protocols regarding surveying for COVID,

CARE FACILITIES: A MODELLING STUDY (18)
 this could help prevent and/or detect outbreaks of the disease. Outbreaks could be caught before they become unsafe for staff and patients.

THE IMPACT OF COVID-19 PANDEMIC ON LONG-TERM CARE FACILITIES WORLDWIDE: AN OVERVIEW ON INTERNATIONAL ISSUES (19)
 COVID-19 affected those who are vulnerable in long-term care homes. A lack of strategies and protocols led to more significant numbers of deaths in nursing home residents. The implementation of specific strategies can lead to the prevention of this.

CARER AND STAFF PERCEPTIONS OF END-OF-LIFE CARE PROVISION: CASE OF A HOSPICE-AT-HOME SERVICE (20)
 Service at night can cause anxiety for the patient and families. An overnight service can help with the negative perceptions of end-of-life care. The lack of overnight hours plays a large role in overnight admissions for patients during the last days of life.

Table 2: Frequency of Occurrence in the Literature

Theme	Occurrences	Instances of Attributes (n)	Percentage (%)
Theme 1: Strategies	1-3, 5-7, 9-10, 14-15, 20	11	55%
Theme 2: Long-Term Care	3, 6, 8, 18-19	5	25%
Theme 3: End-of-life Care	2, 4, 7, 9, 11-13, 16-17, 20	10	50%

4. CONCLUSION

COVID-19 has proved to be extremely trying on healthcare facilities everywhere. The purpose of this study was to determine what successful strategies healthcare leaders used to manage long-term care facilities during the outbreak of the COVID-19 pandemic to improve patient end-of-life care and outcomes. The review provided three themes that demonstrated strategies that could aid in long-term healthcare facilities in improving patient end-of-life care and outcomes. The most prominent themes were strategies, long-term care, and end-of-life care. The research did demonstrate that strategies were able to be implemented that affected long-term facilities and end-of-life patient care, as well as outcomes. The most common theme was implementation of strategies. Innovated strategies were

implemented during the pandemic to help with end-of-life care and patient outcomes. The other themes included long-term care and end-of-life care during COVID-19. Additional research on this topic could consist of a more detailed look into certain regions affected most by the virus. There were numerous locations impacted by this virus. Understanding different strategies that were implemented and successful in other regions could be useful for long-term care elsewhere. Researchers should continue research on successful strategies in long-term care for improvements in end-of-life care and outcomes. Having successful strategies can help future patient outcomes be more positive for the families during end-of-life care.

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