

4-20-2022

The Effects of COVID-19 on Mortality Rates in non-COVID Patients with Chronic Diseases

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Recommended Citation

Dollison, Bailey and Groom, Meghan (2022) "The Effects of COVID-19 on Mortality Rates in non-COVID Patients with Chronic Diseases," *SACAD: John Heinrichs Scholarly and Creative Activity Days*: Vol. 2022, Article 7.

DOI: 10.58809/SDGQ9496

Available at: <https://scholars.fhsu.edu/sacad/vol2022/iss2022/7>

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The Effects of COVID-19 on Mortality Rates in non-COVID Patients with Chronic Diseases



Abstract

Objective: Evaluate the relationship between patients with chronic disease and their mortality rates associated with the COVID-19 pandemic.

Design: Non-experimental, quantitative, descriptive

Setting: Logan County Hospital, Ellsworth County Hospital, Russell Regional Hospital, Allen County Hospital, Clay County Hospital, Ellinwood District Hospital, Wichita Country Health Center, Greenwood County Hospital, Hillsboro Community Hospital, Kiowa County Memorial Hospital, Ness County District #2 Hospital and Smith County Memorial Hospital.

Participants: 10 charts from each of the CAH hospitals listed.

Results/Conclusion: Pending results and data collection

Introduction

The COVID-19 pandemic has placed a huge burden on healthcare facilities across the world and nation, taxing in an already strained system and exposing flaws, cracks, and deficits in an already frail area. Since March of 2020, hospitals have seen an increasingly hard time finding bed placement for all patients, COVID and non-COVID alike. According to Barach, et al. (2020), patients are also hesitant to seek medical care before it becomes life-threatening due to fear of contracting COVID-19 in a healthcare setting. By looking at mortality rates of patients who are hospitalized with a need for higher medical care during the pandemic and prior to the pandemic, researchers can see more patients are passing away in higher numbers while awaiting placement in critical care units or placements at more appropriate hospitals (Unterberg et. al. 2022). With the pandemic continuing to wax and wane, the question is whether or not non-COVID patients are dying at a more increased rate than prior to the COVID-19 pandemic due to lack of access to hospital beds in higher care facilities.

Purpose

The purpose of this study is to describe the relationship between the access to medical care pre-COVID compared to the access to medical care during the COVID-19 pandemic and the effects on the mortality rates on non-COVID patients with chronic diseases.

Key Terms

COVID-19 - SARS-CoV-2 virus

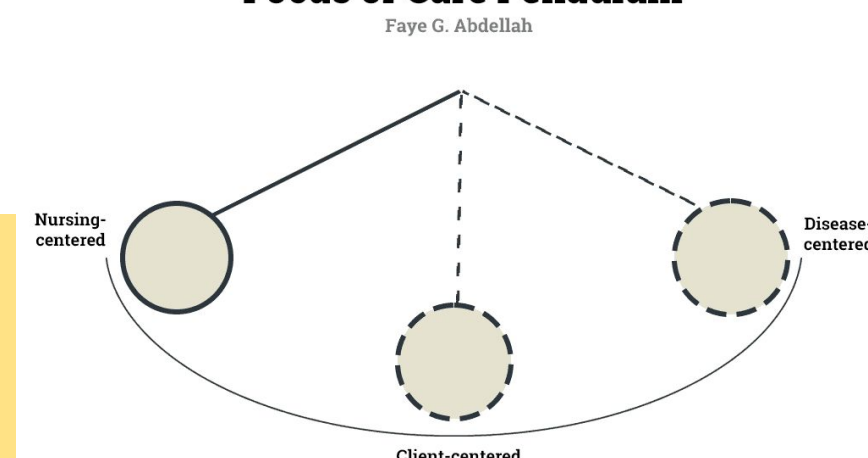
Non-COVID - patients admitted to hospitals with diagnoses other than COVID-19

Critical access hospitals - hospitals with fewer than 25 inpatient beds

Framework

Faye Abdellah spent her career in healthcare as a leader in public health services. Abdellah used twenty-one statements to regarding the health of the public and how to maintain the public health (Gonzalo, 2021). For the purpose of this study, researchers focus on the impact of social problems on influencing causes of illness, the ability to utilize community resources as aids in issues arising from illness, and to recognize physiological responses to illness and disease processes.

Focus of Care Pendulum



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Methodology

Research Design Non-experimental, quantitative, descriptive

Interventions

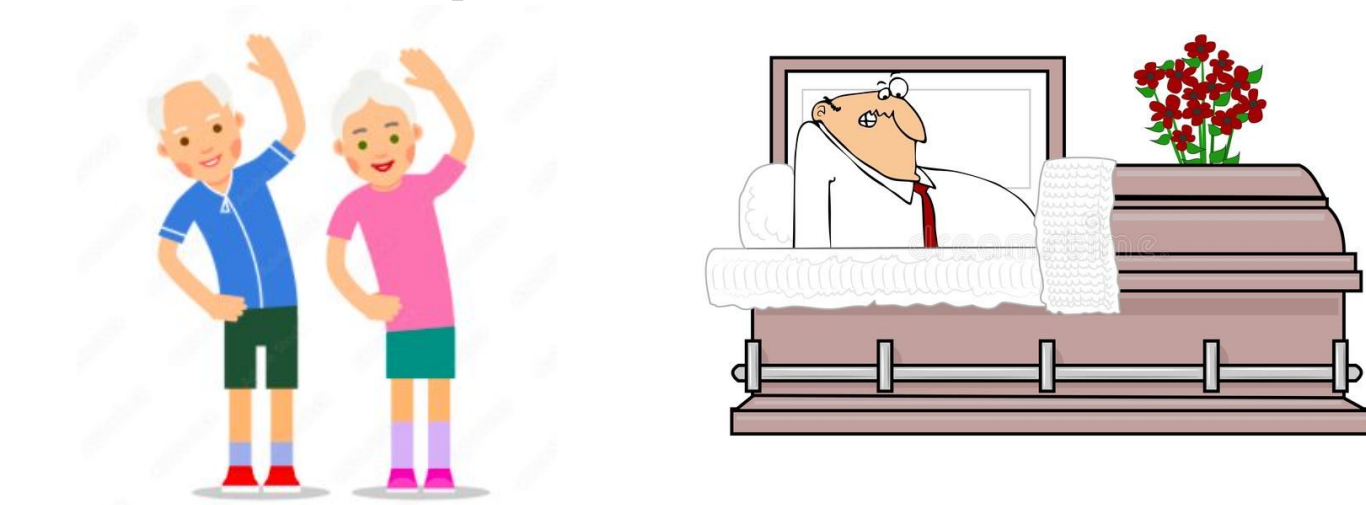
Chart analysis utilizing 12 hospitals to evaluate pre and post COVID conditions.

IV: The COVID-19 pandemic

DV: The mortality rate among patients without a COVID-19 diagnosis

Proposed Research Question

In non-COVID patients, how does getting access to higher medical care compare to pre-COVID access to higher medical care affect mortality rates within the COVID-19 pandemic?



<https://www.dreamstime.com/elderly-people-exercising-old-couple-gymnastics-sport-active-healthy-workout-aged-peoples-grandparents-making-morning-image122970800>

<https://www.dreamstime.com/royalty-free-stock-photo-man-casket-image21652845>

Literature Sources

Mauro(2020) found significant evidence that the number of ED visits have decreased substantially from pre-COVID to current. With the increased need to treat covid positive patients there has been an backlash effect on non-COVID patients seeking treatment for chronic diseases. A survey sent out to doctors around the world felt the pressure of healthcare demand and voiced their concerns, "Less staff availability, delay in discharging duties toward their patients, and increased workload"(Sarma. 2020).

Sample

Stratified random sample of 120 charts from CAH in twelve areas in Kansas.

Ethical Considerations

This exempt study will receive IRB approval from each participating CAH hospital, the nursing department, and FHSU department IRB.

Data Collection

N= 120 charts from the twelve selected CAH hospitals in Kansas.

n= 60 charts pre-COVID per CAH hospital data

n= 60 charts post COVID per CAH hospital data

For this study, hospital charts reflecting mortality rates and percentage of ER visits pre COVID and post COVID will be obtained from the four participating CAHs in Kansas. The data collected will be used to explain mortality rates between pre and post COVID patients who do not have COVID. Our data collection will be Chi square. There will be two groups those with COVID and those without COVID. Analysis on the mortality rate in patients without a COVID diagnosis.

Results/Findings

Projected Data Analysis Method

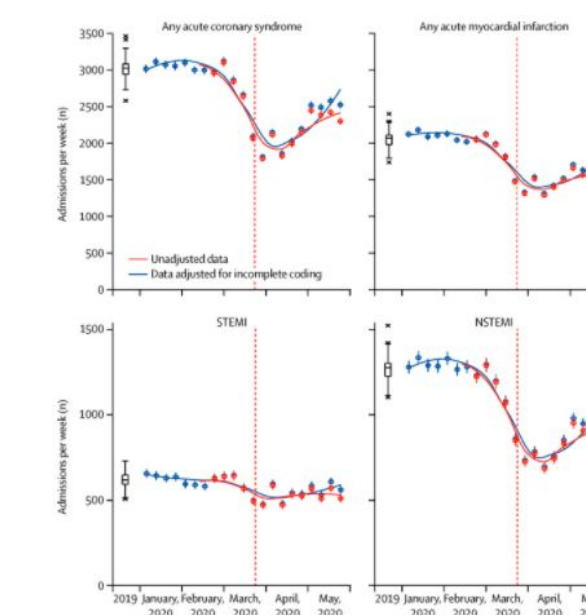
Using Chi square, the data collected from the charts obtained from the selected CAH hospitals will be utilized to explain patients' ability to obtain care during the COVID-19 pandemic in non-COVID patients. The anticipated results of the study will be that non-COVID patient have waited longer periods of time to seek treatment resulting in a higher mortality rate in these patients.

Literature Findings

Clerk A.M.(2021) found in their research that patients with chronic illnesses were left at bay when COVID-19 surged in countries. Hospitals found themselves in supply shortages, including bed and staffing shortages and closed their doors to non-COVID patients.

Barach et. al (2020) found in research hospitals have seen a dramatic decrease in patients presenting to the emergency room with myocardial infarctions and strokes due to fear of contracting COVID-19 from other patients. Sarma et. al (2020) focused on providing care to non-COVID patients in hospitals to provide holistic care without causing disruption to care and the need to form protocols.

[https://www.thelancet.com/article/S0140-6736\(20\)31356-8/fulltext#figures](https://www.thelancet.com/article/S0140-6736(20)31356-8/fulltext#figures)



Discussion

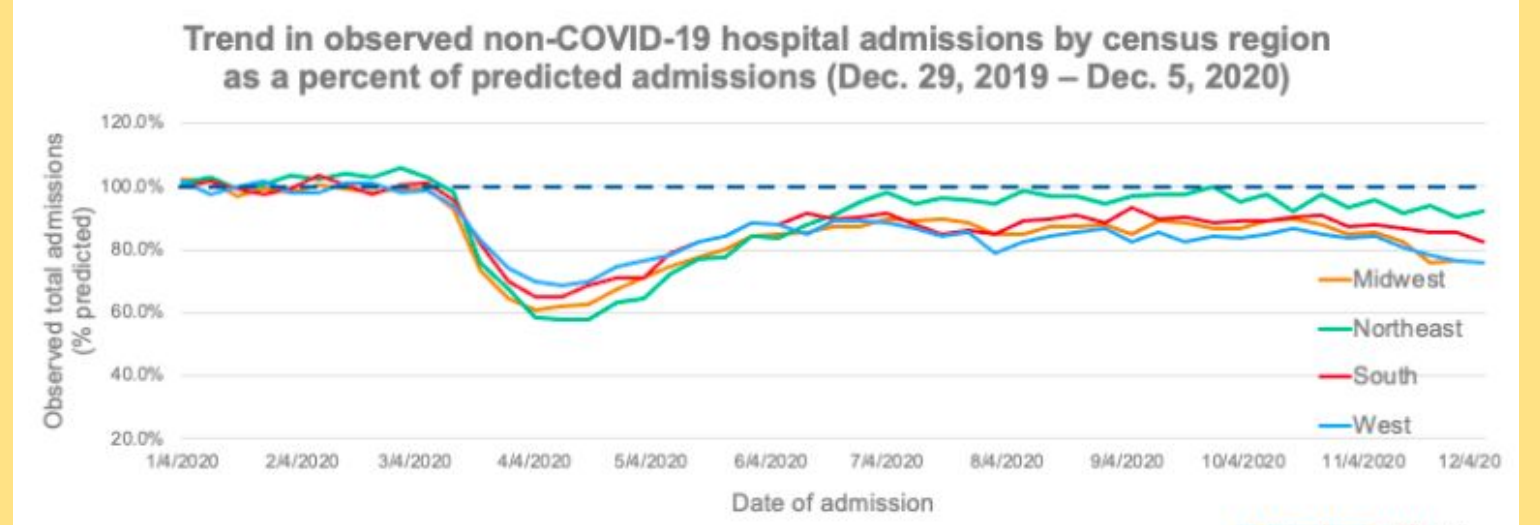
Implications For Nursing

This information can be utilized to understand how the COVID-19 pandemic has affected how non-covid patients obtain care/treatment for chronic diseases leading to higher mortality rates. If the results show patients with chronic illnesses are experiencing medical neglect due to shortages in the healthcare system, quality improvement projects can be implemented based on an as needed basis.

Conclusion

Pending further research, data collection and evaluation, other studies have found that patients in a hospital setting with other chronic illnesses without a COVID-19 diagnosis have a higher mortality rate. This finding is related to delayed healthcare and the inability to transfer patients to higher levels of care throughout the nation. Future research should continue to analyze the mortality rate changes as COVID-19 lessens in status as a pandemic, improving access to higher healthcare, and utilizing a larger data pool.

Figure 3
After A Steep Drop in Non-COVID-19 Admissions in the Spring, There Was Second Decline in the Midwest and West in the Fall



SOURCE: Epic and KFF analysis of Epic Health Record System COVID-19 related data as of January 2021.



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