

## The Effects of COVID-19 on Patient's Perspective of Health Care

Marissa Fuqua RN, FNP(s), Alicia Hernandez RN, FNP(s), Janelle Richart RN, FNP(s), and Abigail Mitchell DHEd, MSN, MBA, RN, CNE, FHERDSA\*

Simmons University, School of Nursing, USA.

### \*Correspondence:

Abigail Mitchell, Simmons University, School of Nursing, USA.

Received: 07 Apr 2022; Accepted: 06 May 2022; Published: 10 May 2022

**Citation:** Fuqua M, Hernandez A, Richart J, et al. The Effects of COVID-19 on Patient's Perspective of Health Care . Nur Primary Care. 2022; 6(3): 1-7.

### ABSTRACT

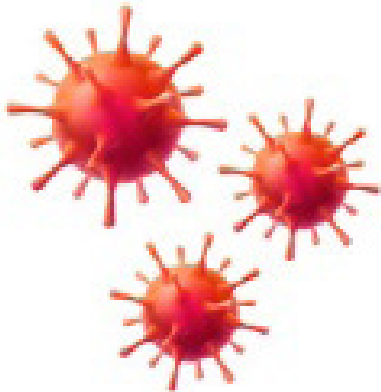
**Introduction:** The COVID-19 Pandemic has changed the way patients access care. While some facilities saw a significant increase in alternative methods of conducting care, such as utilizing telemedicine [1], other areas of care suffered as patients were forced to delay care [2]. These healthcare delivery and reception changes may have altered patients' feelings towards healthcare and potentially disrupted patient/provider trust. This mix-blend study served to identify patients' feelings towards healthcare through a targeted, anonymous survey.

**Methods:** A quality improvement study was implemented in two primary care settings. Data was collected via voluntary and anonymous surveys. The surveys assessed the level of trust the patient had regarding their healthcare pre-COVID-19 and currently. The survey results were then analyzed to determine if there was a correlation between the level of trust and previous healthcare utilization. Results from 74 collected surveys were analyzed to identify if the patient level of trust in the healthcare system had decreased during the COVID-19 pandemic. The raw data was analyzed using Microsoft Excel, and results did show statistical significance between satisfaction and trust pre and during COVID-19.

**Conclusion:** This study showed that the COVID-19 pandemic did alter patient trust in the healthcare system.

### Keywords

Healthcare system, COVID-19 pandemic, Care.



### Introduction

The COVID-19 Pandemic has brought unprecedented attention to the field of healthcare. This attention has ranged from incredibly positive, with media reporting health care workers as “heroes” [3] to highly criticized for walking out on care and refusing vaccine mandates [4]. With the turmoil that healthcare workers have faced during the past 18 months, a conclusion can be drawn that patients' care and perspective on care have been affected. Moving forwards, healthcare providers must determine if there is a lack of trust in the healthcare system. Most importantly, what may generate a lack of confidence, and how can healthcare providers rebuild this trust?

The aims and goals of this quality improvement study was to provide insight into how the COVID-19 pandemic has impacted the patient/provider relationship. By understanding, if a lack of trust in the healthcare system has developed, primary care providers can work on rebuilding trust within their patient population. Building the patient/provider relationship also allows

---

the provider to educate patients about the importance of preventive care for disease prevention. Assessing if patients are as willing to seek preventative care services as they were before the COVID-19 pandemic will help target patient outreach and improve care moving forward.

### Question

Has COVID-19 altered patient feelings towards healthcare, specifically regarding trust in the system, satisfaction of care, and willingness to seek preventive services?

### Problem Statement

According to Ding et al. [5], patients in primary care have delayed seeking medical treatment due to COVID-19. Delays of care can lead to significant medical complications, missed diagnoses, and a loss of overall confidence in the healthcare system. Understanding why individuals delay care is crucial to preventing these poor patient outcomes. This mix-blend research study (QI) aims to identify how patient impressions of health care services evolved between 2019-2021. This study can help primary care providers identify patients' concerns about the healthcare system post-COVID-19 pandemic, assisting in restoring confidence in the healthcare system and diminishing poor patient outcomes.



Nursing Theorist Nola Pender (1982) believed that the goal of nursing should be the optimal health of the individual, and we should focus on how individuals make their healthcare decisions. During the COVID-19 pandemic, safety concerns restricted patient choices. Moving forward, healthcare providers should focus on patient satisfaction areas that can be improved upon, including perceived benefits and barriers to care. Understanding why patients make their decisions aligns with Nola Pender's theories. By understanding the underlying rationale behind patient personal choices, healthcare providers can tailor care to meet these needs, therefore promoting optimal care.

### Literature Review

What was initially viewed as “just another cold” [6] caused unforeseen turmoil in the field of healthcare. The COVID-19 pandemic changed how healthcare is delivered and how patients receive, participate, and view their care. A literature review was conducted to discover how COVID-19 impacted healthcare and

assess how the pandemic changed patients' feelings towards health care. Researchers utilized Simmons Library, CINAHL database, EBSCO, Cochrane Library, and Google Scholar and searched with the following terms: patient perspective, general public, loss of faith, trust, healthcare. The search was limited to studies published between 2019 and February 2022.

### Impact on healthcare

Patients receiving care from oncology to fertility experienced delays in healthcare. According to the systematic review conducted by Riera et al. [7], over 77% of the oncology facilities surveyed (in the 62 studies that met search criteria) experienced delays in care. Lags in care are related to poor health outcomes from emergency settings [8] to routine care [9] and even specialty care [10] [11,12]. These delays in care range from canceled preventative care appointments to the inability to administer essential infusions due to inadequate provider staffing. According to Hartnett et al. [13], emergency department visits decreased by 42% in March-April 2020 compared to the same period in 2019. Patients unable to receive appropriate, timely treatment may have physical complications, such as worsening IBS flares, according to Winter et al. [11]. Not only did patients experience physical hardships due to delays in care, but many also experienced emotional complications.

While providers struggled to implement safeguards to protect patients and staff, creative ways of seeing patients developed, telemedicine increased in popularity, providing a way for patients to visit “face to face” with their provider from the safety of their own homes. Unfortunately, telemedicine limited care to patients with access to appropriate technology and the ability to participate in this form of care. The Centers for Medicare and Medicaid increased reimbursement for clinical visits with telemedicine, making this a more desirable means of communication for providers. However, patients with multiple comorbidities tend to be older and have less access and comfort with using technology [1]. A longitudinal aging study from Amsterdam showed that older adults with increased comorbidities also had a higher chance of having their appointments canceled by their providers [14].

### Feelings toward healthcare

According to Papautsky et al. [9], fear of contracting COVID-19 was the primary reason patients chose not to seek care during the pandemic. Anderson et al. [15] surveyed 1055 individuals and found that over half of them forwent medical care from March of 2020 through July of 2020. Out of the 52% of individuals that did not seek care, 29% reported fear of exposure to COVID-19 [15]. Though there is a discrepancy in the percentage of individuals forgoing care (Gonzalas et al. [2] state that 36 % of the US population between the ages of 18-64 chose not to seek care during the early months of the pandemic), the fear of exposure has prevented patients from receiving the care they need. The pandemic has also brought feelings of anxiety concerning healthcare along with fear. A Cross-sectional anonymous, self-reported cohort patient survey from two Northeast American academic fertility clinics showed that care was delayed by an average of 10 weeks,

---

leading to increased anxiety with patients [10].

Interestingly enough, a lack of trust on the patient's end can also reciprocate a lack of confidence from the provider in healthcare delivery. According to Shen [16], nurses who experienced high trust levels from their patients were more motivated to provide high-quality nursing services. In addition, nurses with higher resilience levels are more likely to deliver a high quality of care, thus increasing trust [17-19].

### **Confidence in health care**

The impact of the COVID-19 pandemic on healthcare and the patient's associated feelings appears to have decreased confidence in the healthcare systems across the world. A 6-month experimental study conducted in Poland by Lewandowski et al. [20] showed that exposing patients to positive healthcare messaging increased faith in their hospital system but decreased faith in their doctors. This finding brings to light the question of how marketing can have a polarizing effect on a population. Chen et al. [20], used comparative surveys from 38 counties, comparing confidence in healthcare to the impact on stay-at-home orders. Interestingly, the counties with higher confidence in their healthcare were less likely to follow stay-at-home orders, potentially with the wrong assumption that if they contract COVID-19, they would be cared for in a timely and appropriate manner [20].

Not only did patients appear to have shaken confidence in healthcare, but providers appeared to have less confidence in their patients presenting for routine care. Santoli et al. [22] conducted a correlational study on vaccine orders and administration rates across the United States.

In the early days of the pandemic, vaccine orders significantly dropped from pre-pandemic rates, and decreased administration rates followed [22]. This study shows that healthcare providers were aware that patients would not attend regular appointments and adjusted their vaccine inventory to account for this. Short staffing may also alter trust as healthcare providers experience less staffing to provide care, such as immunizations and routine care. According to Fosuhemaa Bossman [23], providers must take extra consideration to ensure appropriate staffing, as this may directly correlate to patient trust.

### **Moving past the pandemic**

Suppose trust in the healthcare system has changed with the COVID-19 pandemic. In that case, healthcare providers need to explore how confidence has changed and what healthcare providers can do to establish, maintain, and build trust. Purvis et al. [24] conducted a study to summarize patients' perceptions of the sources that provide COVID-19 information. The study involved over 1,200 adults living in Arkansas. The surveys showed that participants had the highest level of trust in academic medical centers, federal and state public health agencies, and their own health care providers [24]. However, according to Purvis et al. [24], One of the significant causes of decreased trust was a lack of consistent messaging across sources. Therefore, healthcare

providers must be up to date and current on their messaging to instill and maintain confidence.

Healthcare providers must also target individuals at higher risk for lack of trust. A study conducted by Harris [25] aimed to identify what demographics in Norway were at higher risk of fear with regards to COVID-19, as well as lack of confidence. The study involved over 4,000 participants and showed that individuals in medically vulnerable groups were at higher risk for psychological distress and lack of trust in the healthcare system. This study indicates that lack of confidence may not be consistent across all demographics, and therefore rebuilding trust should be targeted. Our study aims to identify what groups may need to be targeted for rebuilding trust by assessing the correlation of confidence regarding age and previous utilization of healthcare services.

## **Methodology**

### **Design**

This study was conducted using a mix-blend research study (QI) that surveyed patients at two primary care facilities. The first clinic was in Pullman, WA, and the second in Lewiston, ID. Both facilities are managed by the same company and provide free healthcare, focusing on preventive care. This mix-blend research study allowed for quantitative analysis of the data and qualitative, as it explored patients' feelings concerning trust in the healthcare system. This study was approved by the Health Clinic Medical Director, Business Manager, and an internal review was conducted by the legal team employed by the clinics in November 2021. IRB approval was obtained via Simmons University.

The strengths of this study included data from more than one location. Obtaining patient information from two patient populations provided a more comprehensive range of opinions not limited by demographic location. In addition, the anonymous survey was designed to allow for multiple-choice selection or fill in the blank. This broad selection of responses allowed participants to express their thoughts and opinions, while the multiple-choice answers provided ease of numerical analysis.

The fact that the survey was voluntarily completed was a limitation of this study. Only participants willing to provide feedback participated, therefore not sampling individuals who may have had differing opinions about their care but chose not to participate. The survey was also anonymous, so study conductors could not clarify survey questions.

### **Data Methods**

Researchers wrote the twelve-question multiple-choice survey to determine patients' trust in healthcare before COVID-19 and during the pandemic. It allowed patients to rate their thoughts using multiple-choice answers or fill out a free-hand "other" section. The study questions could be answered in an open or closed-ended fashion, allowing patients to expound on their ideas while also allowing researchers to analyze the data readily.

## Data Collection

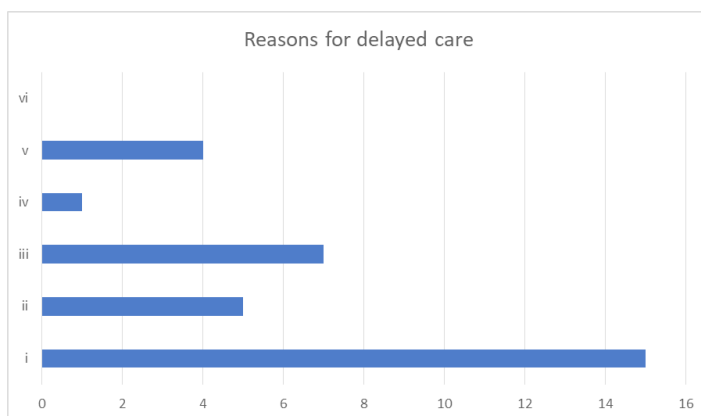
Sampling was conducted in both locations from February 2022 to March 2022, and researchers targeted 500 responses as a sample size. The clinics saw an average of 300 patients each week. Therefore, researchers targeted this sample size predicting that less than half of patients would complete the survey. Completed surveys were collected via a sealed box at checkout to provide another layer of confidentiality. Data collection occurred between February and March of 2022. The total number of surveys collected was 74. All data collected was securely locked and will be stored for three years in the lead researcher's office.

## Data Analysis

Researchers conducted data analysis via Microsoft Excel spreadsheets for ease of comparison and to utilize graphs for visual identification of relationships. Based on patient responses, the surveys allowed numerical comparison of trust in the healthcare setting pre and during the COVID-19 pandemic. It also permitted healthcare providers insight into the areas of patient satisfaction that they can improve on.

Patient written responses, not just multiple-choice answer selection, were provided for additional insight. Finally, researchers analyzed all the data to determine the patterns that arose in the patient responses and determined statistically significant changes were present.

Data was initially input into an Excel format to quantify responses. Next, the data was analyzed using numerical responses to help with data analysis. For example, question one addressed patient age. One point was given for answer "a" (18-25 years of age), 2 points for answer "b" (26-35 years of age), 3 points for "c" (36-45 years of age), 4 points for "d" (46-55 years of age), 5 points for "e" (56-66 years of age) and 6 points for "f" (65+ years of age). If a patient chose not to answer the question, 0 points were assigned—this numerical assignment of the responses allowed for straightforward interpretation and analysis of the results.



Themes were also collected in the data, for example, question three addressed reasons for delayed care, and 32 multiple choices were offered. Response "i" (appointment canceled or unavailable), "ii" (personal preference), "iii" (fear of exposure), "iv" (finances), "v"

(inability to participate in telemedicine), and "vi" (lack of access to an interpreter or other services). Response "i" was the most frequently chosen response, as shown below.

Response "vii" was "Other" and individuals could write in other reasons for delayed care. For example, individuals provided the following answers: "working more," "no time in the schedule," "limited available appointments," "too many restrictions for services," "limited time off due to having to take more time for minor illnesses," and "preventative care screening delayed until six weeks after vaccination."

Patients rated their trust in the healthcare system before the pandemic as an average of 6.82 on a scale of 1-10. Trust currently in the health care system was given an average score of 6.12. This data indicates that trust in the healthcare system has decreased since the onset of the COVID-19 pandemic. Satisfaction in healthcare decreased by 0.7%, while confidence in the US healthcare system decreased by 10% based on averages of patient responses.

Researchers conducted statistical analysis to compare satisfaction to trust pre and during COVID-19, and the research is as follows:

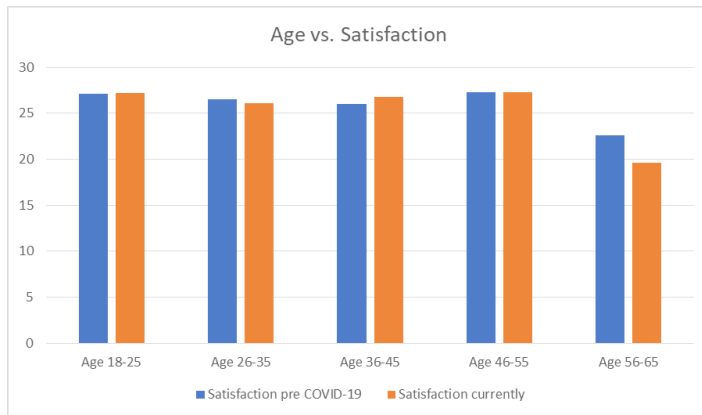
Comparison of Satisfaction and Trust Pre-COVID		
	Variable 1	Variable 2
Mean	26.3	7.207143
Variance	14.35797101	3.597774
Observations	70	70
Pearson Correlation	0.21908727	
Hypothesized Mean Difference	0	
df	69	
t Stat	41.51396147	
P(T<=t) one-tail	7.67194E-51	
t Critical one-tail	1.667238549	
P(T<=t) two-tail	1.53439E-50	
t Critical two-tail	1.994945415	

Comparison of Satisfaction and Trust during COVID-19		
	Variable 1	Variable 2
Mean	26.14286	6.485714
Variance	19.74741	6.137474
Observations	70	70
Pearson Correlation	0.283223	
Hypothesized Mean Difference	0	
df	69	
t Stat	37.10229	
P(T<=t) one-tail	1.29E-47	
t Critical one-tail	1.667239	
P(T<=t) two-tail	2.57E-47	
t Critical two-tail	1.994945	

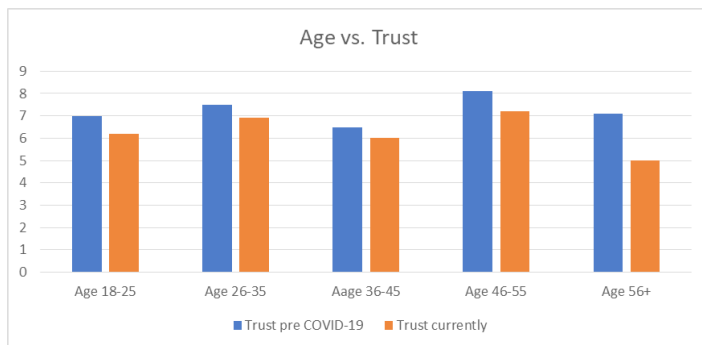
This data indicates that patient feelings towards trust and care satisfaction have changed during the COVID-19 pandemic. Therefore, providers should strive to rebuild trust with their patient population.

Researchers analyzed data to assess age versus average satisfaction and average trust with healthcare pre-COVID-19 and currently.

This assessment is helpful to determine whether healthcare providers need to target specific age groups to help build trust post-COVID-19.

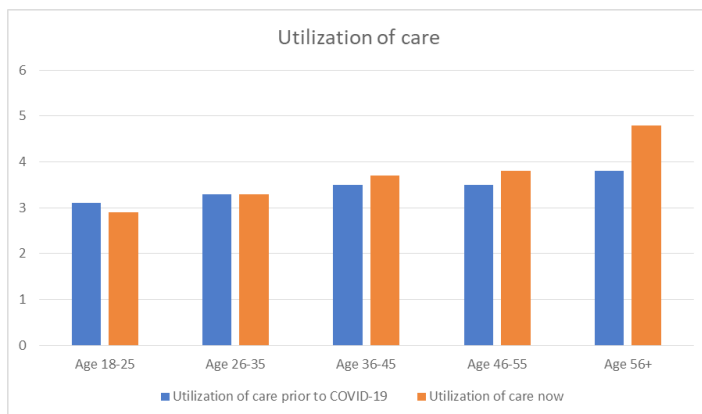


This data indicates that age ranges 26-35 and 56-65 experienced a decline in satisfaction with the healthcare system during COVID-19.



This data indicates that all age groups experienced a decline in trust from pre-COVID-19 to currently.

Lastly, utilization of healthcare services was analyzed pre-COVID-19 and currently based on age.



This data shows that healthcare utilization increased during COVID-19 in ages ranging from 36 to 65 years. Data collected did

not indicate if this care was related solely to COVID-19 testing. Further research is needed to identify what type of care was utilized pre-COVID-19 and currently. This data shows that though trust in the healthcare system decreased with COVID-19 patients could still access care in some fashion.

## Results

Data collected from our 74 studies revealed that trust in the healthcare system decreased from before the pandemic compared to February/March of 2022. Satisfaction in healthcare decreased by 0.7%, while confidence in the US healthcare system decreased by 10% based on averages of patient responses. Reasons for delayed care were provided; out of the 74 answers, "appointment canceled or unavailable" were the primary cause for delayed care. Healthcare utilization in this sample increased slightly (average of 3.4 pre-COVID to 3.7 currently), showing that patients sought care on an average of every 6-9 months both pre-COVID and currently. However, the facilities where the surveys were collected offered free COVID-19 rapid testing. The questionnaire did not specify that responses were not related to COVID-19 testing.

## Limitations

Data for this survey was collected in two primary care clinics operated by the same company. Healthcare at these facilities is free of charge to the patient, and therefore, decreased cost of healthcare may play a role in patient satisfaction. COVID-19 tests were also offered at these facilities free of charge for patients, family members, and roommates. This utilization may have skewed question 7, which asked how often the individual sought care during the COVID-19 pandemic, as the question did not specify this did not relate to COVID-19 testing.

Seventy-four surveys were collected during a two-and-a-half-week period. Consequently, this study is based solely on 74 individual responses.

Initially, the question arose if vaccine status may influence trust in the US healthcare system. However, potentially due to vaccine requirements at the facilities where the surveys were collected, only six surveys were collected from individuals who indicated that they were unvaccinated. Therefore, due to the small number of surveys indicating unvaccinated status, we could not assess if vaccine status was a factor concerning trust.

The surveys were anonymous, and researchers could ask no follow-up questions, nor could clarification be provided. In addition, the rating of trust was only requested for two time periods before COVID-19 (no specific date given) and currently. During this study, Washington State announced that mask restrictions were to be lifted; this significant political shift may have altered perspectives of care.

## Implications for Nursing Practice

While care satisfaction only suffered a slight decrease, healthcare trust was significantly affected. The study showed that healthcare

---

providers should rebuild trust with their patients. The data also showed areas for improvement. The top reason for delayed care was due to canceled or unavailable appointments. Healthcare providers should focus on strategies to reduce cancellation rates and advertise how they reduce the risk of exposure in their facilities. Another area for improvement was the inability to participate in telemedicine. FNPs and other healthcare providers should strive to teach patients about the option of telemedicine at in-person appointments so that patients can become more comfortable with these services.

### Opportunity for further research

This literature review shows the effect that the COVID-19 pandemic had on society's attitudes toward seeking healthcare from urgent needs to preventive care. Patients listed fear of contracting COVID-19 as the main reason for canceling visits. The changing attitudes towards healthcare bring to light the question: what impact does COVID-19 have on the public's feelings towards healthcare moving forward? Do patients feel safe visiting facilities now, has trust in the healthcare system returned, and are patients as satisfied with their care as they were pre-pandemic?

### Conclusion

In conclusion, this study indicates that the COVID-19 pandemic did alter patient trust in the healthcare system, but not care satisfaction. Care was shown to be delayed, primarily due to canceled or unavailable appointments. Post-pandemic healthcare providers should focus on rebuilding trust with their patients by reducing canceled appointments, offering education on how to participate in alternative care options such as telemedicine, and providing a safe environment where patients feel a low chance of exposure to COVID-19.

### References

1. Lam K, Lu AD, Shi Y, et al. Assessing Telemedicine Unreadiness Among Older Adults in the United States During the COVID-19 Pandemic. *JAMA Intern Med.* 2020; 180: 1389-1391.
2. <https://www.urban.org/sites/default/files/publication/103651/delayed-and-forgone-health-care-for-nonelderly-adults-during-the-covid-19-pandemic.pdf>
3. <https://www.cnn.com/2020/11/05/us/coronavirus-frontline-doctors-nurses-outdoor-adventures-cnnheroes/index.html>
4. <https://www.nytimes.com/2021/06/07/us/texas-hospital-workers-suspended-over-mandatory-vaccine-policy.html>
5. Ding YY, Ramakrishna S, Long AH, et al. Delayed cancer diagnoses and high mortality in children during the COVID-19 pandemic. *Pediatric blood & cancer.* 2020; 67: e28427.
6. Van Scoy LJ, Snyder B, Miller EL, et al. Public anxiety and distrust due to perceived politicization and media sensationalism during early COVID-19 media messaging. *Journal of Communication in Healthcare.* 2012; 14: 193-205.
7. Riera R, Bagattini AM, Pacheco RL, et al. Delays and disruptions in cancer health care due to COVID-19

- pandemic Systematic review. *JCO Global Oncology.* 2021; 7: 311-323.
8. [https://doi-org.ezproxy.simmons.edu/10.31744/einstein\\_journal/2021AO6467](https://doi-org.ezproxy.simmons.edu/10.31744/einstein_journal/2021AO6467)
9. Papautsky EL, Rice DR, Ghoneimia H, et al. Characterizing health care delays and interruptions in the United States during the COVID-19 pandemic Internet-based cross-sectional survey study. *Journal of Medical Internet Research.* 2021; 23: e25446.
10. Seifer DB, Petok WD, Agrawal A, et al. Psychological experience and coping strategies of patients in the Northeast US delaying care for infertility during the COVID-19 pandemic. *Reproductive Biology and Endocrinology.* 2021; 19.
11. Winter RW, Ananthakrishnan A, Burke KE, et al. Time to Negative SARS-CoV-2 PCR Should Not Delay Care Among Patients with Inflammatory Bowel Diseases. *Inflammatory Bowel Diseases.* 2021; 27: 590-592.
12. Garrido-Cumbrera M, Marzo-Ortega H, Christen L, et al. Assessment of the impact of the COVID-19 pandemic from the perspective of patients with rheumatic and musculoskeletal diseases in Europe results from the REUMAVID study phase 1. *BMJ Journals.* 2021; 7.
13. Hartnett KP, Kite-Powell A, DeVies J, et al. Impact of the COVID-19 Pandemic on Emergency Department Visits - United States January 1 2019-May 30 2020. *MMWR Morb Mortal Wkly Rep.* 2020; 69: 669-704.
14. Schuster NA, Brieij SD, Schaap LA, et al. Older Adults report cancellation or avoidance of medical care during the COVID-10 pandemic. *European Geriatric Medicine.* 2021; 12: 1075-1083.
15. Anderson KE, McGinty EE, Presskreischer R, et al. Reports of Forgone Medical Care Among US Adults During the Initial Phase of the COVID-19 Pandemic. *JAMA Netw Open.* 2021; 4: e2034882.
16. <https://doi-org.ezproxy.simmons.edu/10.1111/jan.14973>
17. Drach-Zahavy A, Goldblatt H, Admi H, et al. A multi-level examination of nursing students' resilience in the face of the COVID-19 outbreak: A cross-sectional design. *Journal of Advanced Nursing.* 2021.
18. Malone Hubert P, Eichenberger B. Caring Science to Mitigate Nurses' Moral Distress in the COVID-19 Pandemic. *International Journal of Caring Sciences.* 2021; 14: 1492-1495.
19. Williams G. Nursing in the time of COVID-19 exploring nurse preparedness early in a global pandemic. *Australian Journal of Advanced Nursing.* 2021; 38: 59-65.
20. Lewandowski R, Goncharuk AG, Cirella GT. Restoring patient trust in healthcare Medical information impact case study in Poland. *BMC Health Services Research.* 2021; 21.
21. Chan HF, Brumpton M, Macintyre A, et al. How confidence in health care systems affects mobility and compliance during the COVID-19 pandemic. *PLoS ONE.* 2020; 15: e0240644.

- 
22. Santoli JM, Lindley MC, DeSilva MB, et al. Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration - United States, 2020. *MMWR Morb Mortal Wkly Rep.* 2020; 69: 591-593.
  23. Fosuhemaa Bossman I, Castro E, Walden E. The impact of the COVID-19 pandemic on diabetes inpatient specialists nurses in the UK An online survey and FOI request. *Journal of Diabetes Nursing.* 2021; 25: 1-8.
  24. Purvis RS, Willis DE, Moore R, et al. Research Perceptions of adult Arkansans regarding trusted sources of information about the COVID-19 pandemic. *BMC Public Health.* 2021; 21: 2306.
  25. Harris SM, Sandal GM. COVID-19 and psychological distress in Norway the role of trust in the healthcare system. *Scandinavian Journal of Public Health.* 2021; 49: 96-103.