

# Clinical and quality of life effects of home parenteral nutrition patients during COVID-19

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## Purpose

COVID-19 is a new disease, from a novel coronavirus not previously identified in humans. At the time of this study, COVID-19 has resulted in 5.9 million documented cases in the US. Prior to COVID-19, the last global pandemic we experienced was H1N1 of 2009. Since then, research has continued to try to understand the influenza virus, develop treatments, and prepare for subsequent pandemics.

Home parenteral nutrition (HPN) patients are considered high risk during the pandemic due to compromised immune systems, multiple disease states, and a high probability of malnutrition. The purpose of this study is to identify the effects of COVID-19 on HPN patients' overall clinical care and quality of life (QoL).

## Methods

A survey of 34 questions was created assessing demographics, clinical impact and QoL status during COVID-19. The survey was conducted via telephone and online. Active HPN patients from a national home infusion provider were surveyed during a 3 week period from July 31, 2020 through August 24, 2020. Excluded patients included those < 18 years of age. The responses were analyzed using descriptive statistics.

## Results

The survey received responses from 35 HPN patients living throughout the United States. Many of the respondents came from the southern regions.

### References:

COVID Data Tracker. Centers for Disease Control and Prevention. <https://covid.cdc.gov/covid-data-tracker/#datatracker-home>. Updated August 28, 2020. Accessed August 28, 2020.

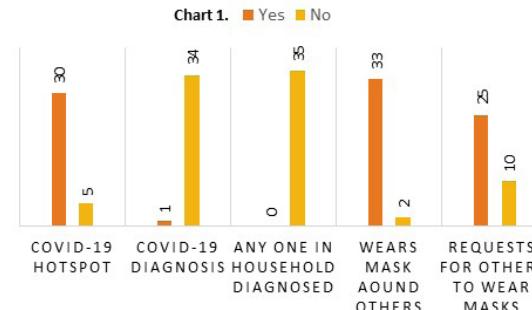
2009 H1N1 Pandemic (H1N1pdm09 virus). Centers for Disease Control and Prevention. <https://www.cdc.gov/flu/pandemic-resources/basics/past-pandemics.html>. Updated June 11, 2019. Accessed August 28, 2020.

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The sample was comprised of 23 females (67.7%), 11 males (32.4%), and 1 with no response. Short bowel syndrome diagnosis accounted for 57% of respondents. Thirty (85.7%) respondents reported living in a COVID-19 hotspot. Only 1 out of 35 respondents had been diagnosed with COVID-19 with 94.3% reported wearing a mask while around others and 71.4% requesting others to wear a mask around them (Chart 1). Table 1 shows responses to questions regarding clinical care during COVID-19. Few respondents reported delays in scheduled surgeries, however 22.9% reported delays in visits with healthcare providers. Overall, 80% of respondents felt like they have received the same level of care during COVID-19 as before the pandemic. Table 2 shows responses to questions regarding QoL during COVID-19. Sixteen (47%) respondents had increased feelings of anxiety or nervousness with 37.5% of those reporting a decline in usual daily activities as a result of those feelings. Twelve (35%) respondents had increased feelings of sadness or depression with 33.3% of those reporting a decline in usual daily activities as a result of those feelings.

## Conclusion

The COVID-19 pandemic has not impacted the level of health care for the survey participants, despite



the noted delay in visits with healthcare providers. Respondents have experienced no loss of family or financial support and no gaps in home parenteral nutrition therapy. Survey results reveal the respondents are diligent about practices to limit their risk of contracting COVID-19 as evidenced by the minimal number of respondents being diagnosed with COVID-19. The COVID-19 pandemic has made an impact on the emotional health of respondents causing feelings of anxiety, depression and a decline of daily activities and independence. In an effort to minimize the impact the COVID-19 pandemic has on their QoL, respondents are encouraged to continually engage with their family, collaborate with support groups and reference evidenced-based resources.

Table 1. Clinical care survey question results

	Value (percentage)
Experienced delays in scheduled surgeries	3 (8.6%)
Reported delays in visits with healthcare providers	8 (22.9%)
Received care via virtual or telephone physician visits	12 (35%)
Reported a preference for virtual or telephone physician visits	17 (49%)
Received the same level of care during COVID-19 as before the pandemic	28 (80%)
Fear of being sent to ER/hospital during pandemic	19 (54%)
Reported no loss of job, loss of wages, loss or change in healthcare insurance	30 (88.2%)
Experienced no impact on family or caregiver support	31 (88.6%)

Table 2. Quality of life survey question results

	Value (percentage)
Reported no loss of family or caregiver support during pandemic	31 (88.6%)
Increased feelings of anxiety or nervousness	16 (47%)
• Of the 16 respondents, reported a decline in usual daily activities due to feelings of anxiety or nervousness	6 (37.5%)
Increased feelings of sadness or depression	12 (35%)
• Of the 12 respondents, reported a decline in usual daily activities due to sadness or depression	4 (33.3%)
Increased concern of future during pandemic	18 (51.4%)
Feeling less independent during COVID-19	11 (31.4%)
Fear of health decline related to HPN during COVID-19	18 (53%)