SHORT REPORT

Transgender Care and the COVID-19 Pandemic: Exploring the Initiation and Continuation of Transgender Care In-Person and Through Telehealth

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Abstract

Gender-affirming care is essential to the health and wellbeing of transgender and nonbinary people. The COVID-19 pandemic has the potential to disrupt transgender care. This study explores transgender care before and during the onset of the pandemic using patient data from 10 family planning clinics in Arkansas, Kansas, Missouri, and Oklahoma. No significant differences were observed in the proportion of transgender care visits pre- or during the pandemic. However, we did find a significantly larger proportion of new transgender patient visits and significantly smaller proportion of established patient visits during the pandemic, with nearly half delivered through telehealth care.

Keywords: COVID-19 pandemic; gender-affirming care; telehealth; transgender care

Introduction

Changes in the delivery of health care services and the suspension or postponement of elective procedures in response to the COVID-19 pandemic has the potential to significantly impede or disrupt access to transgender care, including gender-affirming hormone therapy and surgery.¹⁻³ These disruptions may negatively impact overall social and medical transition, and have subsequent deleterious effects on the mental and physical health of transgender individuals.^{1,2} However, rapid advancements in the use of telehealth and telemedicine, or synchronous video and/or telephone health care visits, have the potential to offer continuity of care and potentially expand access to patients who may otherwise be hindered by in-clinic visits.^{4,5} This may be particularly important for transgender persons living in rural areas or those with limited transgender care provider options.^{6,7}

Little is known about the potential health benefits of initiating or continuing gender-affirming care through telehealth during the COVID-19 pandemic. One recent study by Gava et al., found that among the 108 patients undergoing gender-affirming hormonal treatment between May and June 2020 in Italy, access to telehealth was associated with higher mental health scores (Short Form Health Survey [SF-12]) and lower impact of event scale (IES) scores, suggesting a positive effect of telehealth gender-affirming care on mental health outcomes of transgender patients during the pandemic.⁴ Another study of transgender youth by Sequeira et al. found that almost half of the 204 youth surveyed expressed an interest in receiving gender-affirming care through telehealth, and youth with lower perceived parental support were more likely to express an interest in telehealth for gender-affirming care.⁸

Baseline access to gender-affirming care services in the United States Heartland and South is already significantly limited, with many states and regions, including rural areas, having limited or no access to gender-affirming care providers at all.⁶ A growing body of research suggests that long-term deprivation of adequate transgender

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care may increase existing allostatic load (i.e., stress), and poor mental health outcomes, including depression, nonsuicidal self-injury, and suicidal ideation and behavior, which can ultimately result in a decreased life expectancy of transgender people.⁹ In this respect, not only the start of treatment is important, but also the continuation of ongoing treatment and support.² The purpose of this study was to explore the initiation and continuation of transgender care before (October 1, 2019–March 31, 2020) and during the onset of the COVID-19 pandemic (April 1, 2020–September 30, 2020) among new and established patients receiving transgender care in-clinic and through telehealth in 10 family planning clinics in the United States Heartland and South (Arkansas, Kansas, Missouri, and Oklahoma).

Methods

We extracted patient visit data (visit type, patient type, date of service) from electronic health record (EHR) system reports from a multistate nonprofit family planning clinic network providing care in Arkansas, Kansas, Missouri, and Oklahoma. To meet inclusion criteria for this analysis, visits had to be for initiating or continuing transgender care (i.e., gender-affirming hormone therapy), and conducted in-person or through telehealth from one of 10 family planning clinics across the fourstate network between October 1, 2019 and September 30, 2020 (n = 1828). The total number of sexual and reproductive health visits (excluding abortion services) provided during this time period was also extracted for proportion comparison analyses. Visits were categorized into a pre-COVID-19 period (October 1, 2019-March 31, 2020) and a COVID-19 pandemic period (April 1, 2020-September 30, 2020). We used April 1, 2020 as the cutoff between periods, as this was when most local stay-at-home orders had gone into effect in the region. Additionally, this time period marked the launch of telehealth for all sexual and reproductive health care visits, including COVID-19-related telehealth transgender care. All data were tabulated using Tableau Software[®] (Mountain View, CA).

Descriptive statistics were used to describe the frequency and proportion of transgender care visits to total sexual and reproductive health visits, transgender care visits with new and established patients in each time period, and in-person and telehealth visits during the COVID-19 period. Next, two-proportion *z*-tests were used to calculate differences in proportions of transgender care visits in each time period, and transgender care visits with new versus established patients for each time period. Comparison statistics and effect sizes were conducted in R version 4.0.2 (Vienna, Austria). This study relied on de-identified electronic health record reports with no link to individual patient records and was deemed exempt by the Solutions Institutional Review Board (IRB #20200827).

Results

In total, 1828 transgender care visits were administered between October 1, 2019 and September 30, 2020 across the four state region, with 1028 visits (56.24% of total) taking place during the pre-COVID-19 period and 800 (43.76%) during the COVID-19 pandemic period. The majority of patients who received transgender care during this period identified as White (82.77%), 6.89% Black/African American, and 4.21% as Latinx. Patients attending in-person appointments in Arkansas traveled an average of 50.8 miles, 57.6 miles in Kansas, 43.5 miles in Missouri, and 41.5 miles in Oklahoma. No travel distances were reported for patients receiving telehealth transgender care. Transgender patient visits accounted for 5.52% of all sexual and reproductive health care visits provided at the 10 family planning clinics during the pre-COVID-19 period, and 5.97% of all sexual and reproductive health care visits during the COVID-19 period, with no significant difference detected in these proportions (z=-1.744; p=0.081; d=0.019). Patient type and visit modality for visits in each time period are detailed in Table 1. The number of new transgender patient visits by month across both time periods, as well as in-persononly visits during the COVID-19 period are depicted in Figure 1. The same numbers are shown for established transgender patient visits in Figure 2.

Significant differences were detected in the proportion of new patient visits and established patient visits across the time periods. During the pre-COVID-19 period, new patient visits made up 22.57% of all transgender care visits; during the COVID-19 period,

Table 1. Patient Type and Visit Modalityof Transgender Care Visits

Patient type	Modality	Pre-COVID-19 period n (%)	COVID-19 period n (%)	z	p	d
New patient	In-person Telehealth Total	232 (100)	91 (41.0) 131 (59.0) 222 (27.8)	2.489	0.013	0.12
Established patient	In-person	796 (100)	335 (58.0)			
	Telehealth Total	 796 (77.4)	243 (42.0) 578 (72.2)	-2.489	0.013	0.12
Total		1028	800			



new patient visits made up 27.75% of all transgender care visits (z=2.489; p=0.013; d=0.12). Telehealth visits were unavailable during the pre-COVID-19 period but made up 59% of new transgender patient visits during the COVID-19 period. During the pre-COVID-19 period, 77.43% of all transgender care visits were with established patients; during COVID-19 onset, 72.25% of all transgender care visits were with establ

lished patients (z=-2.489; p=0.013; d=0.12). Telehealth visits made up 42% of established transgender patient visits during the COVID-19 period.

Discussion

Our findings suggest initiation and continuation of transgender care remained a priority among transgender and nonbinary patients even during the onset of the





COVID-19 pandemic. More specifically, the use of telehealth for transgender care was substantial and provided patient continuity and a new mode for initiating transgender care for a number of new patients. A number of key findings in this study highlight the importance of continued access to gender-affirming care for transgender and nonbinary patients. Although there was a drop in the total number of transgender care visits, the proportion of transgender care visits was consistent between the pre-COVID-19 time period and the COVID-19 time period. This suggests that patients continued to seek out gender-affirming care through the onset of the COVID-19 pandemic at roughly the same rate as in the pre-COVID-19 time period, underscoring when transgender care appointments are available, patients will utilize them. Maintaining gender-affirming care, even during a pandemic, was also particularly crucial to transgender health given limited access to follow-up care, and/or suboptimal hormone dosing for gender-affirming hormone therapy may put patients at greater risk for physical health conditions, including increased risk of developing osteoporosis or cardiovascular disease.^{2,10} In addition, delayed or stalled transgender care may have negative mental health effects, including increased allostatic load, anxiety, depression, and suicidality, which have been associated with low or no access to gender-affirming care.²

Telehealth served to bolster the total number of transgender care visits during the pandemic period, with 374 (46.75%) of the 800 visits provided administered through telehealth. This suggests that telehealth care is a viable option for health care providers seeking to increase access and availability of gender-affirming care. In addition, this modality appears to be a suitable option for patients initiating gender-affirming care, as in our sample, over half of new transgender patient visits during this period were administered through telehealth. This is particularly of note in our geography, where in-person transgender care options are limited or too distant to easily access. During the COVID-19 time period, we did implement advertising for our telehealth-administered transgender care, which may have influenced the number of new patient visits in particular. Future research should examine the uptake and utilization of telehealth by patients seeking gender-affirming care in rural or remote locations where in-person care is unavailable.

With the increasing availability and promise of telehealth as a tool for enhancing gender-affirming care access, it is important to note the limitations of this visit modality. There are elements of transgender care that must be conducted in person (e.g., laboratory tests, surgical interventions). Therefore, while it may assist transgender and nonbinary patients initiating or maintaining gender-affirming care, telehealth alone cannot supplant in-person visits entirely. Providers may accordingly expect and prepare for an increase in in-person transgender care visits when COVID-19 risk begins to decline as additional in-person monitoring may have been delayed during this time.

Limitations

This study provides a health care system-level exploration of the initiation and continuation of transgender care before and during the onset of the COVID-19 pandemic. This study provides important system-level insights, but is not without limitations. First, the data derived solely from the EHR system and all data were aggregated. Patient-level data were not provided within the extracted data, therefore little is known about individual patients' experiences receiving transgender care during the COVID-19 pandemic, or how the pandemic may have impeded or improved transgender care. Additionally, while we were able to determine the total number of new and established patient visits across time periods, we were unable to track whether established patients experienced a disruption in care during the COVID-19 period. Second, the study relies on data from 10 community-based nonprofit family planning clinics across four states in the United States Heartland and South. Findings are not necessarily representative of the experiences of all transgender patients, nor transgender patients in this region that may receive their care from private practices or academic medical institutions. Lastly, although we had a large number of transgender patient visits during the observed time periods, transgender care still comprises only a small percentage of the overall sexual and reproductive health care visits provided and the telehealth program launched during the pandemic was designed to provide access to sexual and reproductive telehealth care broadly. The program was not centered on transgender patients. Research among gender clinics that specialize in transgender care may have differing limitations to the implementation and maintenance of in-person and telehealth transgender care visits during the pandemic.

Conclusion

This study explored the continuity of transgender care provision among new and established patients before and during the onset of the COVID-19 pandemic at family planning clinics in the United States Heartland and South. Findings indicated the rate of transgender care visits was consistent between these time periods, and there was a greater proportion of new patient visits during the COVID-19 time period, with over half (59%) conducted through telehealth. These findings underscore the importance of maintaining access to transgender care even during a pandemic, and highlight the potential of telehealth to bolster transgender care provision to patients initiating or continuing gender-affirming hormone therapy.

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Authors' Contributions

L.L. and B.J.H. contributed to the conceptualization and design of the study, analysis and interpretation of the data, and drafting and revision of the article. B.A. contributed to the interpretation of the data and revision of the article. All authors approved the final version of the article.

Author Disclosure Statement

No competing financial interests exist.

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Abbreviations Used

EHR = electronic health record IES = impact of event scale IRB = Institutional Review Board SF-12 = Short Form Health Survey