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COVID-19 Oral Antivirals:
Overcoming Barriers to
Access and Education

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The insurance coverage landscape for oral antivirals has changed since the release of this brief. For the latest information, please visit the COVID-19 treatments webpage.

INTRODUCTION

Although the federal COVID-19 Public Health Emergency has ended, COVID-19 has not disappeared and continues to affect individuals and communities across the country. Vaccination and utilization of effective treatments are critical to reducing the impact of the virus, and a promising avenue for treatment is the use of oral antivirals. For those at high-risk of developing serious complications from COVID-19, these drugs can effectively treat COVID-19 in its early stages, potentially reducing the severity of symptoms and decreasing the risk of hospitalization and death.

Oral antivirals have the potential to play a crucial role in minimizing the effects of COVID-19, particularly among vulnerable populations — yet millions of Americans face significant barriers to accessing oral antivirals.

Current COVID-19 Landscape

The COVID-19 pandemic led to a dramatic loss of human life, health, and economic wellbeing. By May 2023, nearly 104 million US COVID-19 cases, 6 million related hospitalizations, and 1.1 million COVID-19–associated deaths were reported to the Centers for Disease Control and Prevention (CDC).[1] While the virus no longer poses the societal burden that it did when it first emerged, COVID-19 remains a significant public health challenge, as thousands of COVID-19-related hospitalizations and emergency visits are still occurring on a weekly basis in the US as of June 2023.[2]

Recent data from the Kaiser Family Foundation reveals that nearly 70% of adults are not concerned

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about the possibility of severe illness from COVID-19.[3] Only 14% of adults in households affected by COVID-19 made an attempt to seek antiviral treatment, while 77% did not pursue any form of antiviral treatment. Among those who said they or someone in their household was sick with COVID-19, 9% of adults were unaware of oral antivirals altogether.[4] These statistics suggest a sense of complacency or lack of awareness when it comes to seeking treatment, which is a barrier to ensuring all patients can effectively recover from COVID-19.

The pandemic also exacerbated existing health disparities, underscoring the need to explore social determinants of health and their impact on vulnerable populations — many of whom may benefit from the utilization of oral antivirals. While racial and ethnic disparities in COVID-19 cases and deaths have fluctuated during the pandemic, age-adjusted data consistently show that American Indian/Alaska Native (AIAN), Black, and Hispanic individuals experienced higher rates of infection, hospitalization, and death due to COVID-19. Age-adjusted death rates peaked during January 2022 and were higher for Black (37.6 per 100,000), AIAN (34.8 per 100,000), and Hispanic people (30.0 per 100,000) compared with white people (23.5 per 100,000).[5]

Overview of Oral Antivirals

Oral antivirals are a proven avenue for the treatment of COVID-19, particularly in the early stages of infection.[6] They are pills that can be taken orally and have been specifically developed to target the SARS-CoV-2 virus by inhibiting viral replication and therefore helping reduce the severity of COVID-19 symptoms. The Food and Drug Administration (FDA) has granted full approval of one and emergency use authorization for the second of two oral antiviral treatments for individuals with a diagnosis of mild to moderate COVID-19 who are at high risk of progressing to a severe disease state. While the specific clinical criteria for taking oral antivirals may vary depending on the drug, medical professionals, including physicians and other authorized healthcare providers, including in some cases pharmacists, can prescribe oral antivirals based on their clinical assessment.

Understanding the ongoing impact of COVID-19 on high-risk populations, including those above the age of 50, is crucial to address gaps in utilization of treatments. This literature review will explore the current landscape of oral antiviral utilization, uncover disparities in access, identify gaps in research, and propose solutions to increase the use of medications that may improve health outcomes.

ACCESS TO ORAL ANTIVIRALS

Ensuring equitable access to oral antivirals is critical to minimizing the impact of COVID-19 and preventing hospitalization and death. The availability and cost of treatment are important factors to consider, particularly for vulnerable populations who may face additional barriers to accessing healthcare.

With the aim of providing widespread access to effective COVID-19 treatments, the federal government has taken significant steps to make oral antiviral treatments accessible for all Americans. Following the ending of the Public Health Emergency in May 2023, oral antiviral treatments purchased by the federal government will continue to be available and free of cost for everyone in the US until the federally distributed supply is depleted. After that point, oral antivirals are expected to be covered widely by public and private insurance, but the out-of-pocket costs paid by the patient will vary depending on their plan. Notably, patients with Medicaid will continue to receive tests and oral antiviral treatments free of cost until at least September of 2024.[7] The role of pharmacists in prescribing oral antivirals has also been strengthened, as the Public Readiness and Emergency Preparedness Act (PREP Act) continues to offer liability immunity for pharmacists, pharmacy technicians, and pharmacy interns dispensing COVID-19 treatments until federal distribution ends.[8] Measures that empower patients to access oral antivirals — particularly in the post-pandemic era — can improve the uptake of treatments and save lives.

Geographic and Socioeconomic Disparities

Geographic challenges contribute to gaps in access to oral antivirals. Rural populations face greater difficulty accessing treatment and experience longer travel times to oral antiviral dispensing sites, including Test to Treat locations.[9] Consequently, some Americans lack ready access to healthcare facilities that can dispense oral antivirals for COVID-19, leading to unequal distribution of treatment options.[10] Economic disparities also hinder access to oral antivirals. Counties in non-metropolitan areas and those with high poverty rates are more likely to face barriers in receiving treatment.[11] Additionally, oral antivirals are dispensed at a rate half as much in zip codes that have high social vulnerability compared to wealthier zip codes, indicating that social and economic factors influence access to these medications.[12]

The pandemic exposed deep-seated inequities and barriers in accessing COVID-19 treatments, particularly among vulnerable populations, including racial/ethnic minorities and economically disadvantaged individuals.[13] Limited social, economic, political, and environmental resources, combined with illness or disability, increase their risk for poor health outcomes.[14] Unfortunately, utilization of COVID-19 treatments remains low; research published in the Journal of General Internal Medicine found that only about 17.9% of all patients participating in the study received proper treatment, and those at increased risk are less likely to have access to treatment.[15]

Racial Disparities in Prescribing Practices

Disparities in prescribing practices also exist along racial and ethnic lines. During April to July 2022, oral antiviral prescriptions were lower among Black, Asian, AIAN, and mixed-race individuals compared to white patients.[16] Despite being at higher risk, the percentage of Black and Hispanic patients treated with prescribed oral antivirals was found to be 30-36% lower than that of white patients.[17] These disparities highlight the need for targeted efforts to ensure equitable access to oral antivirals across all racial and ethnic groups.

Clinical Barriers to Promoting Oral Antiviral Utilization

There are several clinical barriers that hinder the widespread utilization of oral antiviral drugs in the treatment of COVID-19 — these challenges include possible interactions with other medicines, low provider awareness, and the risk of starting therapies too late.

In clinical settings, one significant concern is the possible interactions between oral antiviral drugs and other medications that patients may be taking. Healthcare providers are encouraged to carefully evaluate potential drug interactions to ensure patient safety and optimize treatment outcomes.[18]

Provider awareness may also contribute to the barriers surrounding oral antiviral utilization. Some physicians may not be adequately educated on when and how to prescribe these medications.[19] Despite their positive safety and efficacy profile, some physicians may be hesitant to prescribe these treatments, particularly for patients with multiple risk factors, based on concerns about potential drug interactions, fears of COVID-19 rebound after taking the medication, and potential drug effects on patients with renal impairment.[20] In some cases, doctors have opted to withhold oral antivirals from vulnerable individuals instead of pausing other medications for a few days, as they are concerned about interactions with other drugs.[21]

Another clinical barrier is the risk of initiating oral antiviral therapy too late in the course of the illness. To achieve the maximum benefit, oral antivirals should ideally be started within five days of symptom onset to maximize their effectiveness, requiring timely access to healthcare providers who can prescribe these treatments.[22] Delays in seeking medical care or receiving a diagnosis may limit the potential benefits of oral antivirals.

Overcoming these prescribing concerns and addressing patient feedback is crucial to ensuring the appropriate and widespread use of oral antiviral treatments in combating COVID-19.

Misinformation and Misperceptions

Misinformation or misperceptions surrounding the use of oral antivirals in the treatment of COVID-19 contribute to barriers in their uptake and utilization. To maximize the potential benefits of oral antiviral treatments, it is essential to address misinformation, improve awareness and education, and work towards equitable access to these critical medications.

Some individuals may be deterred from using oral antivirals due to misconceptions or fears surrounding potential side effects.[23] Low rates of utilization of available oral antivirals indicate that patients may not be using them due to concerns about potential rebound effects, lack of awareness about their availability and benefits, and confusion over who is appropriate for treatment.[24] As such, misconceptions have resulted in denying treatments to individuals who could potentially benefit from oral antivirals.[25]

Additionally, just 24% of Americans now believe that contracting COVID-19 poses a great or moderate risk to their health.[26] However, about four in ten adults (37.6%) ages 18 and older in the US (92.6 million people) have a higher risk of developing serious illness if they become infected with COVID-19, due to their age or health condition.[27] These statistics are likely underestimates as they analyze the population of adults ages 65 and older, although individuals who are above the age of 50 have already reached the high-risk threshold to develop severe symptoms.[28] According to CDC, the risk of death due to COVID-19 is 25 times higher among individuals ages 50-64 years compared to those ages 18-29 years.[29] Informing people of their risk status, as well as the fact that age remains the strongest risk factor for severe COVID-19 outcomes, will be critical to ensuring that self-perceptions of risk among vulnerable groups are factually accurate.

Without a consistent stream of information and educational channels that inform patients on qualification criteria and alleviate cost concerns, limited utilization of oral antivirals will be an ongoing challenge among high-risk populations.

THE COVID-19 VACCINE: A CASE STUDY

The COVID-19 vaccine rollout provides valuable insights that can not only be applied to the next pandemic, but also to challenges in relation to oral antivirals. These lessons include addressing medical mistrust among vulnerable populations and improving communication strategies to inform high-risk communities about their COVID-19 risk status, as well as the factors that influence it.

One crucial lesson is the importance of understanding and ameliorating medical mistrust among vulnerable populations. Historical experiences of systemic discrimination and mistreatment have led to deep-rooted mistrust within certain communities, particularly among racial/ethnic minorities.[30] Building trust through transparent and culturally sensitive communication is essential to ensure the acceptance and uptake of healthcare interventions, including oral antiviral treatments. Specific strategies highlighted by experts that helped promote trust among communities of color and encouraged them to receive the COVID-19 vaccines included acknowledging patient uncertainties, tailoring responses to concerns in a nonjudgmental manner, and explaining the development and regulatory processes of the vaccines using accessible language.[31]

Additionally, the COVID-19 vaccine rollout highlighted the significance of effective communication channels in informing communities about their risk status — particularly how age and various compounding risk factors, such as underlying health conditions and socioeconomic status, can significantly impact an individual's vulnerability to severe illness from COVID-19.[32] Research analyzing the challenges with communicating information about COVID-19 during the pandemic highlights the need for messaging to be culturally congruent and delivered by trusted messengers, with misinformation and disinformation being countered quickly.[33] Ensuring that information is accessible, accurate, and delivered through appropriate channels is crucial for equipping individuals with the knowledge they need to make informed decisions about their health.

By drawing on the lessons learned from the COVID-19 vaccine rollout, effective strategies can be developed to address medical mistrust, improve communication efforts, and inform communities about their COVID-19 risk status and the importance of oral antiviral treatments. Creating inclusive and culturally competent approaches will foster trust, empower patients, and contribute to equitable access to and utilization of these critical treatments.

OPPORTUNITIES FOR ADDITIONAL RESEARCH

While work to raise awareness of oral antivirals and increase access is ongoing, there is a need to conduct additional research on Americans' perceptions of COVID-19 treatments and the virus itself, in 2023 and beyond. This research should focus on identifying any discrepancies in levels of awareness and knowledge about oral antivirals among vulnerable populations to gain a better understanding of why patients and healthcare providers may be hesitant to use or prescribe oral antivirals.

Another important area for research is the treatment patterns for patients who test positive for COVID-19 and the subsequent course of action they take following their diagnosis. More research is needed to examine the options being pursued and to understand the factors influencing the decisions made by patients once healthcare providers have made the prescription.

While the perception of risk related to COVID-19 has been studied, there is a lack of publicly available data on the number of individuals who are aware that they are at higher risk for contracting the virus. It is essential to explore whether individuals who are objectively at high risk are knowledgeable about their risk status and the steps they should take.

Solutions and Next Steps

By taking proactive measures, such as enhancing awareness, improving healthcare provider/patient education, and leveraging government support, we can work towards a comprehensive approach that facilitates timely treatment to oral antivirals and prevents negative health outcomes.

- To address cost concerns surrounding COVID-19 treatments, it is important to raise awareness of the fact that oral antiviral treatments purchased by the federal government will continue to be available and free of cost for everyone in the US until the transition to traditional coverage, likely in the fall of 2023. After that point, oral antivirals are expected to be covered by insurance plans with out-of-pocket costs varying depending on an individual's coverage.

- Data shows that patients tend to abandon treatment when faced with high copays; there is an opportunity to ensure that patients benefit from low or no out-of-pocket costs for COVID-19 treatments assigned by insurance plans once coverage begins, thereby increasing treatment adherence after the transition to traditional coverage. Additionally, ensuring that patients who are covered by Medicaid know that they are able to receive COVID-19 tests and oral antiviral treatments without cost sharing through September 2024 can increase the use of oral antivirals.

- State and federal government support, such as through mobile testing and prescription sites and initiatives like the Test to Treat program, have proven effective in increasing the use of COVID-19 tests and oral antivirals. The current administration has announced it will continue the Test to Treat initiative following the end of the COVID-19 Public Health Emergency, ensuring access to care for Americans impacted by COVID-19.[34] Encouraging the use of these sites can help increase the utilization of both tests and treatments.

- There is a need to raise awareness about the risk factors that put individuals at high risk for COVID-19, including age and health conditions. By increasing awareness of these factors, individuals can better understand their risk status and take appropriate measures to protect themselves.

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