COVID-19 and Community Partner Response

Throughout the 2019-2020 school year, the University of Cincinnati College of Medicine and Hamilton County Public Health Department (HCPH) have engaged in a partnership which allowed medical students the opportunity to serve the community and learn about public health initiatives. HCPH is responsible for many different programs intended to improve the health and well-being of Hamilton County residents. One of these programs is a robust needleexchange program aimed at reducing the spread of infectious disease by decreasing the amount of "dirty" needles in Cincinnati. The program functions by offering safe locations for IV drug users (referred to from here on as clients) to exchange used syringes for clean ones and connecting clients to rehabilitation programs and resources when requested. This system has proven very effective in the past, but has had to change in order to continue serving this at-risk population in Cincinnati. According to their website, HCPH has switched from a "walk-in" to a "by appointment" system in order to adhere to COVID-19 social distancing policies. Anyone can make an appointment via email, call, text, or Facebook and will receive a month's worth of clean supplies. In addition to this, HCPH has been contacting their clients with updates on state policy and changes to accessing necessary resources like healthcare, housing, and food ("Hamilton County Public Health Modifies Syringe And Harm Reduction Services During COVID-19 Pandemic - Hamilton County Public Health", 2020).

Hamilton County instituted a county-wide mask mandate before the state order was released. HCPH has played a vital role in encouraging Hamilton County residents to adhere to the policy and has issued signs to inform citizens that masks are required anytime they leave their home. Mask usage, whether homemade or medical-grade, for everyone has been proven to decrease the transmission of COVID-19 and protects the public health. In addition to information on mask mandates, the HCPH website also provides a link to a map with testing sites for those who want or require COVID-19 testing. There is also a FAQ section to help individuals determine whether they need testing, and answers other popular questions about the pandemic. HCPH has issued other statements reminding community members of the importance of maintaining childhood vaccinations, despite the pandemic, and urges families to seek care safely during this time. Additionally the website displays updated data for COVID-19 epidemiology in the county. There are also several links to the Ohio COVID-19 site, which offers data, updates, recommendations, and guidelines for the state. These efforts have been supported by The National Association of County and City Health Officials (NACCHO) grant, awarded to only 25 local health departments in order to enhance infectious disease prevention and control in high risk facilities. This grant is designed to bolster COVID-19 efforts by enhancing the local health department's ability to control the outbreak of COVID-19 ("Hamilton County Public Health Lists COVID-19 Numbers Daily On Website - Hamilton County Public Health", 2020).

Since the beginning of the pandemic, HCPH has made changes to staffing and daily operations in order to adhere to COVID-19 social distancing policies. In January, Greg Kesterman was named Interim Health Commissioner for Hamilton County and remained in this role throughout the early stages of the pandemic. He was officially named County Health Commissioner in July, and was recognized for his strong leadership throughout the novel pandemic. The lobby of the main building is still open during normal business hours, but HCPH has requested that forms such as birth and death certificates be completed entirely online. Their phone line remains available twenty-four hours a day, and they have updated their website to include many excellent resources about work, school and community health recommendations (Home - Hamilton County Public Health, 2020).

COVID-19 and Community Impact

Hamilton County has been massively impacted by the COVID-19 pandemic. Since quarantine bagan in March 2020, Hamilton County has seen increases in unemployment, resource limitations, homelessness, domestic abuse, and incidences of mental health related complaints.

Many lost their jobs due to the pandemic and in April 2020 the county reached peak unemployment rates with 14.2% of Hamilton County residents claiming unemployment, a dramatic increase from the 4.4% unemployment rate recorded in March 2020. Since April, the unemployment rate within Hamilton County has dropped to 10.7%; however, this rate is still higher than any other spike in unemployment recorded in the last 30 years (Unemployment Rate - Hamilton County, n.d).

Despite this increase in unemployment, the state of Ohio did not enact a moratorium on residential evictions and the county saw a surge in homelessness (May, 2020). There have also been reports of landlords changing locks and turning off utilities as a way to force people to move. To combat these issues, the Strategies to End Homlessness organization administered new Eviction Prevention funding from the Ohio Housing Finance Agency and the Coalition on Housing and Homelessness in Ohio. With the partnership of Legal Aid Society, this program is designed to provide rental assistance of 2-3 months' rent to those facing eviction (COVID-19 and Cincinnati Homelessness: An Update, 2020).

In addition to loss of income, the pandemic forced the closure of many agencies and businesses in Hamilton County(Cincinnati COVID-19 Coronavirus Community Resources, n.d.). This unfortunately included organizations that provide essential resources to populations in need. One such organization is the Community Action Agency. This agency ran a program called Head

Start which provided preschool education at no cost to income-eligible families and also provided numerous health services(Community Action Agency: COVID-19, n.d.). This agency closed their doors during the early stages of the COVID-19 pandemic's surge in the US, leaving many of these families without the health and child care they had previously relied on. This is one example of many organizations forced to close their doors at this time, including UC's own Student Run Free Clinic(Cincinnati COVID-19 Coronavirus Community Resources, n.d.).

Another concerning trend witnessed since the beginning of the pandemic is an increase in reported domestic abuse in Hamilton County. Women Helping Women, an organization that provides support to survivors of gender-based violence, has noted a 23% increase in domestic violence clients and over a 50% increase in calls to their abuse hotline(What We Do, n.d.). There also appears to be a rise in aggressive forms of abuse, such as strangling and use of weapons. It is speculated that these incidents are underreported due to fear of calling the helpline while quarantined with their abuser per the stay-at-home orders (DeMio et. al., 2020). While there is some speculation on the exact nature of domestic violence in this time there is a clear increase in cause for concern.

The rate of suicide deaths in Ohio has been climbing in the past decade according to a 2020 Ohio University report. While the average 10 year suicide death rate in Hamilton County was among the lowest in Ohio (12 deaths / 100,000 population), suicide remains the leading cause of death in the 10-34 age group (Mental Health and Addiction Advocacy Coalition, 2020). The isolation and economic damage brought on by the COVID-19 pandemic is likely to further increase the rate of sucide deaths statewide. While county-level mental health data is not yet available, a national survey by Kaiser Family Foundation (KFF) found a 60% increase in adults reporting a negative impact on their mental health between March 2020 and August 2020. The KFF survey also found that 12% of those reporting a negative mental health impact had turned to substance abuse as a coping mechanism (Panchal et al., 2020). While all substance abuse poses a health risk, vaping and smoking are especially concerning. Vaping and smoking increase the risk of developing lung disease, which increases the risk of developing serious complications from COVID-19 infection (Smoke-free Air: United States: Breathe Easy Hamilton County, 2020). Resources, such as the Hamilton County COVID Care line, have been made available to Hamilton County/Ohio residents to combat COVID-19-related mental health issues.

COVID-19 and Patient Advocacy

This generation of physicians and medical students has recognized patient advocacy as a critical aspect of holistic healthcare. In the past, this took the form of a physician working with a single patient to connect him or her to resources that would improve his or her health and wellbeing.

With the rise of social media, physicians have been able to expand their reach to advocate for patients they have never met through the use of platforms such as #MedTwitter. #MedTwitter is an online community of thousands of medical professionals and students who have flocked to social media as a way to dispel medical misinformation by answering common questions with credible sources. These physicians provide free education by sharing journal articles directly to the community and interact with users to emphasize the importance of evidence-based medicine. #MedTwitter has evolved into a powerful platform for patient advocacy because it allows for the dissemination of information to populations with limited access to resources. Throughout the last few months, medical professionals have educated the Twitter Community about COVID-19, social determinants of health (SDOH), and how to safely advocate for others through voting in this year's election.

According to the Hamilton County Public Health Department (HCPH), their recent educational efforts have been focused on COVID-19 related topics (Home - Hamilton County Public Health, 2020). Specifically, proper use of personal protective equipment, vaccination (influenza, future COVID-19, etc.), socially-distanced needle exchanges, and smoking cessation. Currently, the HCPH Twitter account is largely/mostly used to disseminate evidence-based information about the pandemic; however, it might be beneficial for HCPH to increase its influence by joining the thousands of medical professionals on #MedTwitter. Hamilton County serves an extremely diverse population with many unique needs and a wide range of outcomes across its territory. Through aligning with #MedTwitter, HCPH can find new ways to address disparities in healthcare while also sharing with other organizations how HCPH has been able to improve the well-being of its people. It would also allow HCPH to garner more support from government officials for issues facing the Cincinnati area, such as infant mortality amongst African Americans, the opioid epidemic, and the disproportionate effects of the pandemic on communities of color.

While online communities like #MedTwitter can be a powerful tool for patient advocacy, physicians and medical students should use caution when disseminating information on these platforms. Twitter, in particular, restricts posts to 280 characters forcing physicians to oversimplify complex medical topics, which leads to more misinformation. Additionally, the high throughput of misinformed tweets/social media posts dilutes the potential impact that physicians can have on online platforms. One study notes that there have been a few instances in which physicians have inadvertently shared private patient information. While social media has fostered a transparent environment between physicians and patients that has led to greater educational outreach, healthcare professionals need to ensure that they are following appropriate guidelines to prevent misinformation and breaching of patient confidentiality (Pershad et al., 2018).

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