

## The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)

Ms. Sreyashi Sen<sup>1\*</sup>

### ABSTRACT

The COVID-19 pandemic has had a substantial effect on the community participation and social inclusion of people with Significant Mental Health Issues (SMHI) or Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD). The implementation of public health measures, including stay-at-home orders, closures of non-essential services, and social distancing standards, has had a disproportionately negative impact on this vulnerable population. Understanding the unique difficulties faced by individuals with SMI and ASD during the pandemic is essential for addressing their needs and promoting their social inclusion. This research review aims to examine the effects of COVID-19 on individuals with SMI and ASD, as well as their comprehension of the pandemic. By examining the experiences of people with SMI and ASD, we can gain insight into the global disruptions they have encountered. The pandemic has caused disruptions in educational and occupational settings, difficulties in maintaining home and leisure routines, limited access to behavioral health services, and modifications in healthcare delivery. The impact of COVID-19 on the community participation and social inclusion of individuals with SMI and ASD demonstrates the need for continuous skill development for these individuals. Focusing on the development of adaptive skills that enable them to navigate challenging situations, maintain social connections, and participate in meaningful activities is crucial. In order to improve the responsiveness of healthcare and support services to the unique needs of the ASD population during future emergencies, system development is also essential.

**Keywords:** COVID-19, Pandemic, Community Participation, Social Inclusion, Significant Mental Health Issues (SMI), Autism Spectrum Disorder (ASD), Social Distancing, Educational Disruptions, Vocational Challenges

Since the emergence of the novel coronavirus illness (COVID-19) in China in late 2019, it has rapidly spread throughout the world, with significant morbidity and mortality. COVID-19 has evolved into a global health emergency. (MHFW, 2020) As a result of the epidemic and unprecedented lockdown, separation from loved ones, loss of independence, uncertainty regarding illness status, boredom, limited food, and home

<sup>1</sup>Department of Sports Biosciences, Central University of Rajasthan, India

\*Corresponding Author

Received: September 14, 2023; Revision Received: November 23, 2023; Accepted: November 25, 2023

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

supplies, and inadequate information all contributed to increased psychological stress. (Ahmed et al., 2020; Rajkumar, 2020) This led to anger, confusion, also symptoms of PTSD which is known as post-traumatic stress disorder. (Brooks et al., 2020). The COVID-19 pandemic wielded immense power and had a greater capacity to affect everyone's lifestyles, social lives, and family relationships. As if an uninvited guest (COVID-19) had remained for an indefinite amount of time. (Maral, Punetha, 2022)

Due to the pandemic, the entire world came to a halt; therefore, WHO worked globally to address the population's mental health needs. WHO collaborated with the Member States and partners to improve the mental health of individuals and societies. This included initiatives to promote mental health, prevent mental disorders, and provide access to high-quality, human rights-respecting mental health care. The World Health Organization (WHO) established the WHO Special Initiative for Mental Health (2019-2023): Universal Health Coverage for Mental Health in 2019, to provide 100 million additional people in 12 priority countries with access to high-quality, affordable mental health care.

WHO's mental health activities consist of both normative and national support initiatives. WHO has contributed to the expansion of mental health insurance in over 110 nations and is active in HIV, tuberculosis, and gender violence. Suicide prevention; Mental health workforce development; Quality of care and promotion of the rights of those in need (Quality Rights); Mental health policies and laws; Psychological and mental health support in humanitarian crises. Innovative psychological interventions, including digital interventions, are developed and tested. Mental health in the workplace; The economics of mental health; Children's mental health; Promotes mental health. (WHO, 2020)

Participation in leisure, work, education, and social activities was severely hindered, restricted, or eliminated by restrictions. The impact of COVID-19 has brought about significant changes in community participation patterns, which continue to fluctuate as we navigate through the evolving circumstances. The adjustment to the "new normal" of operating during a pandemic has presented unique challenges, leading to varying levels of community engagement. This fluctuation is particularly evident as many states progress through different reopening phases, each with its own set of guidelines and restrictions. The ongoing pandemic has disrupted the traditional ways in which communities come together and participate in various activities. Social distancing measures and restrictions on gatherings have forced individuals and organizations to find alternative ways to engage with their communities. Virtual platforms and online communication tools have become essential in maintaining connections and facilitating participation. Despite the challenges, communities have shown remarkable resilience and adaptability. Many have embraced innovative approaches to continue their participation, such as organizing virtual events, webinars, and online forums. These platforms have allowed individuals to share ideas, discuss important issues, and collaborate on projects, albeit in a different format. However, it is important to acknowledge that community participation patterns are not uniform across all areas. (Sen.S, 2022,; Nuñez, A.2021) Humans are active, social creatures with a long history on this planet, making it difficult for them to live alone. At all stages of life, social connections are essential for the survival of the human race. Beginning with a personal connection to their mother, humans end their lives with social connections. In addition, humans are born helpless, vocal but unable to speak, and in need of care from a caring

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

individual or individuals who are committed to their care. This demonstrates that humans are social creatures who find it difficult to be alone (Rattaz et al., 2013)

This analysis focuses on the impact of the pandemic on community participation and social inclusion of individuals with Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD). It discusses the various difficulties that people who have autism spectrum disorder (ASD) face all over the world, such as the disruptions that can be caused by changes in educational and occupational settings, the difficulties that can arise in home and leisure routines, the limited access to behavioral health services, and the changes in health service delivery that are caused by the pandemic. It brings attention to the necessity of ongoing skill development for individuals as well as development within systems to better respond to the needs of the ASD population in the event of future disasters. In accordance with the National Institute of Mental Health (NIMH), there is a definition for severe mental illness (SMI) which states that it encompasses various mental, behavioral, or emotional disorders that can lead to significant functional impairment. These disorders have the potential to substantially interfere with or limit an individual's ability to engage in one or more major life activities. It is important to note that the NIMH is a reputable source for mental health information and their definition provides a comprehensive understanding of the impact of SMI on individuals' lives. (NIMH,2017). ASD, also known as Autism Spectrum Disorder, is a complex neurodevelopmental disorder that is primarily described by deficiencies in social communication, limited interests, and recurrent behaviors. It is important to note that ASD is a spectrum disorder, meaning that it can manifest in a wide range of ways and vary in severity from person to person. Individuals with ASD often experience challenges in social interactions and communication. They may struggle with understanding and using nonverbal cues, such as facial expressions and body language, which can make it difficult for them to establish and maintain relationships (APA, 2013).

The current Coronavirus disease 2019 (COVID-19) pandemic has modified the structure and delivery of outpatient mental health services for individuals with serious mental illness (SMI) and Autism Spectrum Disorder (ASD). It had a greater impact on the social and mental health of individuals with ASD compared to the general population. Not only are people with developmental and behavioral disorders more susceptible to infection, but they are also more likely to become infected. (Centers for Disease Control and Prevention, 2020a) Numerous individuals with ASD have coexisting medical conditions, such as obesity, cardiovascular disease, or respiratory issues. (Jones et al 2016, Kohane et al.2012), which increased their risk of severe COVID-19 illness (CDC,2020b). In addition, they frequently face obstacles to accessing health care, such as language barriers, a lack of designated health care services, and stigma. Researchers believe that studying the pandemic's impact on this population should be a top priority because these factors increase the risk of COVID-19-related mortality and lower healthcare utilization. (Malik, 2021)

State and federal regulations restrict face-to-face interaction. In particular, health facilities are urged to limit in-person contact. Individuals receiving care through the public mental health system are particularly vulnerable during public health crises, so the transformation in care delivery has profound implications for public health. (Druss, 2020). Consequently, many individuals have experienced the negative effects of disrupted routines, decreased social interaction, and lack of physical activity on their health and well-being. According to the researcher (Galea et al., 2020), there has been a notable rise in various negative

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

outcomes such as depression, anxiety, drug addiction, loneliness, and domestic violence. These issues have become more prevalent in recent times, and their impact on individuals and communities cannot be ignored. The mentioned study sheds light on the concerning trends and highlights the urgent need for addressing these challenges. It is crucial to recognize the interconnectedness of these problems and develop comprehensive strategies to tackle them effectively. By acknowledging the existence of these issues, we can work towards creating a healthier and more However, it is important to note that individuals with Autism Spectrum Disorder (ASD) already encounter various obstacles when it comes to group and social interaction (Myers et al., 2015; Simpson et al., 2019). These challenges can have significant impacts on their social and mental well-being. Unfortunately, the COVID-19 pandemic and the subsequent restrictions imposed have only served to worsen these barriers and exacerbate the negative consequences on their social and mental health. Lockdowns and social isolation have been found to have a significant impact on daily routines, leading to increased levels of stress and social isolation (Patel et al., 2020; Pellicano & Stears, 2020). These measures, implemented as a response to the COVID-19 pandemic, have disrupted the normal flow of life for many individuals. The restrictions imposed by lockdowns have limited people's ability to engage in their usual activities and interact with others, resulting in a sense of detachment and loneliness. Numerous studies have highlighted the negative consequences of these disruptions on mental health and well-being. Courtenay and Perera (2020) found that the disruption of daily routines caused by lockdowns can lead to increased stress levels. This is supported by Jeste et al. (2020), who also noted that social isolation resulting from these measures can contribute to heightened stress and anxiety (Manning et al., 2020). The number of publications based on the COVID-19 impact has recently increased. In this regard, the primary objective of this commentary is to conduct a systematic analysis of the research conducted on the effect of the pandemic on community participation and social inclusion of individuals with SMI and Autism Spectrum Disorder (ASD).

### ***SMI and ASD; Their increased Vulnerability***

Social isolation and loneliness are significant mental health problems affecting everyone. Specifically, social involvement and community participation appear to be crucial for those with serious mental health disorders. The unknown is its psychological influence on those with mental illnesses. (Kim and Su, 2020) advocate lockdown, isolation, quarantine, and limited community engagement as the primary psychoneuroimmunity preventive techniques to reduce pathogen exposure in the absence of a treatment or vaccine for COVID-19 (Kim and Su, 2020). A recent study found no correlation between quarantine and the prevalence of mental health issues in the general population (Zhu et al., 2020). Despite this, the COVID-19 pandemic has had a sudden and significant effect on the worldwide healthcare infrastructure, transportation, daily activities, travel freedom, and medical resources distribution.

The World Health Organization (World Health Organization [WHO], 2002) defines vulnerability as "the degree to which a population, individual, or organization is unable to predict, cope with, resist, and recover from the repercussions of disaster." Individuals with Autism Spectrum Disorder (ASD) face unique challenges due to their ability to communicate, interact with others, and executive functioning differences, as outlined by the American Psychiatric Association (APA, 2013). These inherent characteristics of ASD, combined with the presence of common co-occurring conditions such as anxiety disorder

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

and intellectual disability, can make individuals with ASD more susceptible to the effects of the ongoing pandemic. For behaviors to be adapted appropriately during the pandemic, it has been essential for all communities to continuously take in huge amounts of public health information subject to rapid change.

Both the mental health of psychiatric patients and their access to psychiatric services could be significantly impacted by the sudden modifications that have been implemented. (Montemurro, 2020). In addition, mental health professionals who are deployed to care for COVID-19 patients may be at risk of suffering from burnout as a result of their work (Kim and Su, 2020). To a commendable degree, the primary concentration of health service efforts has been directed toward COVID-19. Nevertheless, we must also be watchful and take precautions to make certain that psychiatric services are not overlooked in the course of the ongoing pandemic. Because it was discovered that psychiatric inpatient wards are the ideal breeding habitat for the coronavirus (Kim and Su, 2020), it is recommended that the majority of stable psychiatric patients undergo therapy at home to limit the likelihood of becoming infected. The ability of many people with ASD to respond effectively and efficiently to the pandemic is hindered by differences in their receptive communication skills as well as possible delays in the processing of information (Wallace et al., 2016). This is because many people with ASD have trouble understanding what other people are saying to them. People who have autism spectrum disorders are more likely to have difficulties with expressive communication, which can make it difficult for them to convey their feelings of emotional discomfort, physical pain, or other symptoms of disease (Rattaz et al., 2013; Wagner et al., 2020). As a consequence of this, many people who have autism spectrum disorder may find that they are more dependent on their relatives, caretakers, or other staff members to be able to communicate vital pandemic information to them or identify indicators of potential sickness. Most of the problems were faced by the female gender because as per the research it has been seen that females are likely to get affected more than males because of their sociable character (Howlin et al, 2013): Another study revealed the current state of affairs for women. In a cohort study, it was found that worsening psychiatric conditions were associated with factors such as female gender, having no or minimal interaction with family and friends, not being satisfied with the actions of the government, and feeling a lack of control over the situation. All of these factors were examined. During COVID-19, older patients, who considered themselves optimists or realists, used social media as they normally would, and were able to express their concerns with family and friends were less likely to indicate that their psychiatric disorders had worsened. It is important to note that some of these findings were validated in the clinical cohort. According to professionals, female patients in mental care required much more changes to their pharmaceutical regimen. (Gobbi et al, 2020).

According to a study conducted by a researcher (Huang and Zhao, 2020), it has been observed that anxiety symptoms have seen a significant rise in the population as a whole since the onset of the pandemic. However, it is important to note that individuals with Autism Spectrum Disorder (ASD) already experienced an increased incidence and seriousness of anxiety symptoms even before the pandemic began. (Van Steensel et al., 2011). Individuals with ASD may also struggle with core components of resilience, such as predicting the future, imagining multiple outcomes for a given situation, and adapting to and being flexible with sudden changes (Wallace et al., 2016). Regrettably, the current state of affairs has led to a significant erosion of predictability for a large portion of the population.

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

This disruption of the familiar and expected has had a profound impact, particularly on individuals who heavily depend on stability and routine to maintain their overall well-being. Consequently, these individuals may find themselves facing heightened challenges and obstacles as they navigate through these uncertain times. Given the widespread and rapid occurrence of various disruptions, individuals have encountered significant challenges in adequately preparing themselves for forthcoming new experiences or modifications to their established activities and schedules. (Levante et al., 2022) Significant unknowns remain regarding the novel coronavirus and COVID-19, and the longer these unknowns persist, the more difficult it becomes to restore a sense of normalcy. Individuals diagnosed with Autism Spectrum Disorder (ASD) often experience a multitude of co-occurring needs that can significantly impact their daily lives. These needs may include intellectual disability (ID), learning difficulties, chronic medical conditions like seizure disorders, and behavioral and emotional health issues. The presence of these additional challenges can make it more difficult for individuals with ASD to adapt and cope with their surroundings. It is important to recognize that individuals with ASD are not solely defined by their diagnosis. They are unique individuals with their own set of strengths and weaknesses. However, the high prevalence of co-occurring needs among individuals with ASD highlights the complexity of their experiences. Intellectual disability is one such co-occurring need that is often seen in individuals with ASD. This means that they may have limitations in intellectual functioning and adaptive behavior, which can impact their ability to learn and navigate the world around them. Learning issues, such as difficulties in reading, writing, or math, are also commonly observed in individuals with ASD. These challenges can further hinder their educational progress and overall development. In addition to cognitive challenges, individuals with ASD may also face chronic medical concerns like seizure disorders. (Narzisi, 2020a)

In general, individuals with developmental disabilities are more susceptible to mental health conditions than the general population. The fear of COVID-19 has been found to be associated with various reactions and symptoms in communities without developmental disabilities, which could pose substantial obstacles for individuals with Autism Spectrum Disorder (ASD). For instance, acute stress reactions and posttraumatic stress symptoms have been linked to the fear of COVID-19 (Liu et al., 2020). Additionally, recent onsets of psychotic or mood symptoms have been observed in individuals exposed to the coronavirus (Diaz & Baweja, 2020). Furthermore, the fear of COVID-19 has been found to contribute to deteriorating thoughts of suicide and suicidal attempts (Ammerman et al., 2020). Considering these findings, it is important to recognize that individuals with ASD may face heightened difficulties in coping with the fear of COVID-19. (Gosling et al., 2022).

Individuals with Autism Spectrum Disorder (ASD) may have a higher likelihood of sharing both inherited that is genetically proclaimed and physiologic risk factors for COVID-19, alongside vulnerabilities associated with their medical diagnosis and psychological well-being. There have been numerous studies conducted that have provided evidence of increased levels of proinflammatory cytokines in individuals diagnosed with Autism Spectrum Disorder (ASD) (Saghazadeh et al., 2019). Emerging evidence indicates that at least one phenotype of COVID-19 infections can cause a "cytokine storm" that can cause cardiac and pulmonary damage (Lin et al., 2020). Individuals with ASD who contract the virus and have a propensity toward a pro-inflammatory state may experience more severe symptoms (deSousa Lima et al., 2020). Furthermore, it is worth mentioning that recent studies have shown that individuals diagnosed with Autism Spectrum Disorder (ASD) face a

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

greater likelihood of experiencing various health challenges compared to the general population as a whole (Dunn et al., 2019). These challenges include but are not limited to sensory difficulties and physical impairments (Kinnear et al., 2020) as well as an increased risk of developing type 2 diabetes. It is important to note that type 2 diabetes has been identified as a potential associated with poor recovery from COVID-19 infection (Cariou et al., 2020).

Finally, it is crucial to remember that many individuals with ASD identify with pre- and post-pandemic populations that have been documented to experience health disparities. Research has shown that there is a notable disparity in the prevalence of Autism Spectrum Disorder (ASD) between transgender and gender-diverse individuals, as opposed to cis-gendered individuals. Numerous studies have consistently indicated that the rates of ASD tend to be higher within the transgender and gender-diverse population. This finding highlights an important intersection between gender identity and neurodevelopmental conditions, shedding light on the complex interplay between these two aspects of human diversity. It is worth noting that these findings do not imply a causal relationship between being transgender or gender-diverse and having ASD. Rather, they suggest a correlation or association between the two (Warrier et al., 2020), populations are known to experience healthcare disparities (Daniel & Butkus, 2015). In a similar vein, it is worth noting that the impact of COVID-19 has been particularly devastating for African American, Hispanic/Latinx, as well as other non-white populations, with a particular emphasis on males. These communities have faced significant challenges and hardships because of the pandemic. The research carried out by a few researchers (Kullar et al., 2020; Macias Gil et al., 2020) sheds light on the disproportionate toll that COVID-19 has taken on these marginalized groups. The findings of these studies highlight the urgent need for targeted interventions and support to address the specific vulnerabilities and disparities faced by these communities. It is crucial that we acknowledge and address these disparities to ensure equitable access to healthcare and resources for all populations affected by the pandemic. Although it is widely acknowledged that current discrepancies in medical availability and amenities play a significant role in contributing to the aforementioned disparity, it is worth noting that certain studies have also suggested the involvement of potential inherited or biological vulnerabilities within different ethnic groups. (Raisi-Estabragh et al., 2020). Given the aforementioned vulnerabilities, it is likely that individuals with ASD within these populations pose an even greater risk and require priority attention during this pandemic.

### ***COVID's Influence on the SMI and Autism Community***

Globally, COVID-19 mitigation strategies were implemented; in the countries, many of these strategies (e.g., stay-at-home orders, and social distancing) left individuals with disabilities without access to critically needed services and support, thereby increasing their vulnerability. (Baweja et al, 2022) The immediate repercussions of this pandemic have been felt by individuals with Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD), as well as their loved ones, caregivers, greater natural supports, and the professionals who provide assistance to them. Families and caregivers of children with SMI and ASD, particularly those with intellectual disabilities or complex needs, are aware that "it takes a village" These families utilize multiple services and providers to meet their children's educational, vocational, and functional needs (Cidav et al., 2013., Baweja et al, 2022). Adults with ASD may rely on community-based service providers for assistance in achieving their self-determined community participation objectives. Research findings

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

indicate that a considerable number of individuals diagnosed with Autism Spectrum Disorder (ASD) encounter difficulties when it comes to generalizing learned skills. It has been observed that these individuals tend to excel and grasp new abilities most effectively when they are presented within the particular setting within which the skill is intended to be performed. As a result, based on the research conducted by a few researchers (Dotson et al. 2010., Baweja et al. 2022), it has been found that these services are often most effectively provided directly at the location where they are needed. This means that various activities of daily living, such as personal hygiene, meal preparation, and household chores, would be taught and practiced within the familiar and comfortable environment of one's own home, with the necessary support and guidance provided. Similarly, community skills, including social interactions, navigating public transportation, and engaging in recreational activities, would be taught, and reinforced in real-life settings within the community itself. This hands-on approach allows individuals to directly apply and generalize the skills they learn, promoting greater independence and integration into society. Additionally, informative and vocational tasks would ultimately be conducted on-site, ensuring that individuals receive the necessary training and support to develop the knowledge and skills required for academic and career success. By tailoring the learning environment to specific contexts and needs, individuals can maximize their potential and achieve their goals in a holistic and comprehensive manner. During the implementation of stay-at-home and shelter-in-place orders, as well as the closure of neighborhood locations and not vital health services, families, caretakers, and other natural supports were faced with the responsibility of fulfilling most service needs. This was particularly challenging due to the severely limited options available (Eshraghi et al., 2020., Baweja et al, 2022). Simultaneously, professionals encountered difficulties in providing services remotely, as they grappled with the constraints imposed by social distancing standards. As a result of the ongoing global pandemic, many countries have had to make significant modifications or impose restrictions on a wide range of essential services. These changes have had a profound impact on various aspects of daily life, particularly in the areas of education, vocational activities, unstructured leisure time, and access to health services for individuals with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI). The pandemic has disrupted the traditional educational landscape, forcing schools and educational institutions to adapt to remote learning models. While this transition has allowed for continued learning, it has also presented challenges for individuals with ASD and SMI who may require additional support and specialized services (Chen et al., 2016). The lack of in-person interaction and the absence of structured routines have made it difficult for these individuals to fully engage in their educational activities and receive the necessary assistance. Furthermore, the restrictions imposed on various recreational and leisure activities have limited the opportunities for individuals with ASD and SMI to engage in unstructured leisure time. Many community centers, parks, and recreational facilities have been closed or have implemented strict guidelines to ensure social distancing. This has resulted in a reduction of social interactions and recreational opportunities, which are essential for the overall well-being and development of individuals with ASD and SMI. In addition to the challenges in education and leisure, access to healthcare services has also been significantly impacted. The strain on healthcare systems and the need to prioritize COVID-19- related care has led to delays and disruptions in routine medical appointments and mental health services. (Summers et al, 2021; Baweja et al, 2022)



## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

### ***Consequences of COVID-19 on Education and Employment***

Brick-and-mortar schools in the country were abruptly closed to prevent the spread of infection at the onset of the pandemic before many distance learning methods had been developed. Regarding the general education curriculum for students without learning disabilities or needs, most educators faced a significant challenge in rapidly adapting to distance learning. (Dal Pai et al, 2022). Educators who are striving to modify special education curricula and provide relevant services for children with Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD), as well as those with complex and/or communication needs, are undoubtedly encountering a significant challenge. The consequences of this situation were far-reaching, leading to a significant decrease in the availability of special education services throughout the entire nation. It is important to note that during this challenging period, state and federal education departments provided limited assistance and guidance to educators on the most effective ways to deliver these crucial services to students in need. During the unprecedented and challenging times of the ongoing pandemic, it has been observed that a considerable portion of children diagnosed with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI) have unfortunately experienced a reduction in the availability of essential services. These services, which include speech expression and language therapy, professional therapy, and physical therapy, play a crucial role in supporting the developmental needs of children with ASD. The impact of the pandemic on the provision of services for children with ASD cannot be overlooked. Due to various factors such as lockdowns, social distancing measures, and overwhelmed healthcare systems, many families have faced difficulties in accessing the necessary therapies for their children. This has resulted in a significant reduction in the amount of support and intervention that children with ASD and SMI have been able to receive. Speech and language therapy is an integral part of the treatment plan for children with ASD, as it helps them improve their communication skills and overcome challenges in speech and language development. However, the limited availability of in-person therapy sessions during the pandemic has made it difficult for children to receive the consistent and specialized support they require. Virtual therapy sessions have been implemented as an alternative, but they may not be as effective for all children, especially those suffering from serious mental issues (SMI) (Eshraghi et al., 2020).

The transition to remote learning posed a significant challenge for children who were accustomed to the structure and routine of a traditional school environment. These students relied on the familiar schedules, cues, and personalized support, such as 1:1 instruction or the assistance of a paraprofessional, to thrive academically. However, with the sudden shift to online education, these children were bound to use and do well academically in using a tablet or laptop within the confines of their homes. This change in the learning environment presented a unique set of obstacles for these students, as they had to adapt to a new mode of instruction while still meeting academic expectations. In addition, their parents or caregivers now needed to assist them with their educational challenges, even though they may have been working from home, caring for other family members, preparing meals, and performing household chores (Dal Pai et al, 2022). Parents may lack the necessary training and experience to effectively implement their children's education plans, despite likely having a deep understanding of their children's strengths and weaknesses. For many students, the transition to completing schoolwork with their parents in their homes, surrounded by highly preferred activities, was likely unfamiliar and challenging. (Vasa et al, 2021) While it is true that many children are familiar with working and interacting with

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

electronic devices such as cellphones, tablets, and laptops, it is important to note that their preference often lies in engaging in self-directed activities like watching YouTube videos. However, when it comes to communicating with a teacher and actively participating in virtual instruction, this may be a less familiar experience for them. When it comes to children who rely on different methods of communication, like actions or photograph exchange, engaging in virtual interactions often requires having parental or additional support readily available to help with conveying their responses. (Dal Pai et al, 2022). Adapting to these obstacles could require considerable time and effort on its own. Requiring parents and caregivers to actively engage in the process of learning their child's educational programming, modifications, and adaptations, as well as implementing operational reinforcement strategies, and developing an achievable and feasible schedule for teaching their child, can undoubtedly present a herculean task in the realm of education delivery. (Baweja et al, 2022; Dal Pai et al, 2022 Reduced access to essential community amenities (Eshraghi et al., 2020; Dal Pai et al, 2022; Baweja et al, 2022) and potential loss or reduction of employment were also significant changes experienced by adults with ASD during the pandemic. Adults with ASD are more likely to experience increased social isolation (Howlin et al., 2013), lower community participation (Tint et al., 2017), and decreased participation in social activities. Previous research demonstrates that adults with ASD across the spectrum are more likely to be unemployed or underemployed than their neurotypical peers (Roux et al., 2013). According to a researcher (Lindsay, 2017), it has been observed that numerous adults with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI) heavily depend on the assistance provided by support staff in various aspects of their lives. These areas include transportation, task administration, and operational community participation. The reliance on support staff in these domains highlights the challenges faced by individuals with ASD and SMI in navigating daily activities and engaging with their surroundings. Transportation is a crucial aspect of independent living, and for adults with ASD and SMI, it can present significant difficulties. Due to the unique characteristics and needs associated with ASD and SMI, individuals may struggle with using public transportation or driving themselves. As a result, they often rely on support staff to assist them in commuting to work, appointments, or social engagements. This reliance on guidance staff for transportation not only ensures their safety but also enables them. Due to the unprecedented circumstances brought about by the COVID-19 pandemic, individuals with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI) had faced numerous challenges. The disruption of essential services, the furloughing of jobs, and the temporary closure of community locations have all contributed to a significant increase in unstructured time for adults with ASD and SMI. This sudden influx of free time has presented unique difficulties, as individuals may struggle to navigate this unstructured period without the usual support systems in place. Moreover, the lack of support during this time has further compounded the challenges faced by adults with ASD and SMI. The closure of therapy centers, educational institutions, and other vital resources has left many individuals without the necessary assistance and guidance they rely on. The absence of these support systems has made it particularly challenging for individuals with ASD and SMI to cope with the sudden changes and adapt to the new normal (Chen et al., 2016). The rapid and unexpected nature of the changes brought about by the pandemic has also posed significant difficulties for adults with ASD and SMI. Individuals on the autism spectrum often thrive on routine and predictability, and sudden disruptions can be particularly distressing. The abrupt shift in daily life, coupled with the uncertainty surrounding the duration of these changes, has made it even more challenging for individuals with ASD and SMI to adjust and find stability in their lives. It is

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

crucial to recognize the unique struggles faced by adults with ASD during this time and to provide them with the In an effort to minimize their chances of contracting the highly contagious COVID-19 virus, it has been observed that adults with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI) who are currently residing in group homes, attending off-site grown-up day services, or living independently with support have made the decision to temporarily relocate and move in with their family members or caregivers. This precautionary measure has been taken due to the increased vulnerability of individuals with ASD to the virus, as well as the potential challenges they may face in adhering to strict safety protocols in their current living arrangements. By opting to live with their loved ones or caregivers, these adults with ASD and SMI are able to benefit from a more controlled and protected environment, where the risk of exposure to the virus is significantly reduced (Constantino et al., 2020). This was necessary to maximize health precautions and reduce isolation, but it can also contribute to feelings of diminished independence and increased routine disruption. Even though no official statistics have been released to date, it can be hypothesized that adults with ASD are experiencing significant economic difficulties as a result of the current pandemic. As countries "re- opened" after the initial pandemic wave, the resumption of community activities such as school and work may have remained a challenge for those with ASD (Neece et al., 2020). Although individuals with ASD frequently enjoy social environments, they can also be anxiety-provoking. Some individuals may require gradual approaches to reintroducing school, work, or social locations (Summers et al, 2021). Retraining skills that have been neglected for several months may require additional time to become familiar and comfortable again. All members of the community, including those with ASD, will have to adapt to new restrictive procedures, such as mask requirements and occupancy limits. This may be especially stressful as they reengage in activities and settings that were once extremely comfortable and familiar (Smile, 2020)

### ***Home and Recreational Challenges and the Effects of Service Provision***

Due to the implementation of various limitations on employment, education, and community access in order to prioritize essential activities, it is evident that a vast majority of individuals have encountered a notable augmentation in the amount of unstructured time spent within the confines of their own homes. Consequently, many people with ASD and SMI struggle with executive functioning, which includes planning, organization, task initiation, and self- monitoring (Wallace et al., 2016). Due to protocols for self-isolation and quarantining, the COVID-19 pandemic has caused a significant increase in social isolation. This has had disastrous results for everyone, but particularly for those who were already vulnerable, such as people with psychosocial disabilities. (de Girolimo et al, 2020) Many day centers for mental health have been forced to close as a result, while patients who are normally free to come and go have been confined in residential facilities (Summers et al, 2021). As a result of these changes, people with severe mental illnesses have been placed under a great deal of stress. (de Girolimo et al, 2020). It is difficult to modify routines, generate new ideas, and independently incorporate them into daily schedules due to deficiencies in these skills. In addition to the aforementioned points, it is worth noting that a considerable number of individuals diagnosed with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI) exhibit a tendency towards having restricted or inflexible areas of interest. Although these particular interests may not pose any issues when complemented by a diverse range of social opportunities, it is possible to find oneself in a state of being "stuck" in these highly favored interests or activities when faced with an abundance of

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

unstructured time and a lack of schedule flexibility. (Lam et al.,2008). These comforting fixations may hinder the development of necessary skills and adaptations to changing circumstances. As our schedules start to settle into a more predictable rhythm, we may find ourselves faced with the challenge of reallocating our time to accommodate additional significant pursuits and interests. Children or adults with Serious Mental Issues (SMI) and Autism Spectrum Disorder (ASD), a neurodevelopmental condition characterized by difficulties in social interaction and communication, often face challenges in maintaining focus on tasks. This struggle to concentrate can be particularly evident during unstructured periods of time. In such situations, individuals with ASD and SMI may have heavily relied on the assistance and support of their loved ones, caregivers, or other genuine supports to engage in activities and occupy their time. The reliance on these individuals is often a result of the difficulties individuals with SMI and ASD experience in initiating and sustaining attention on their own. Due to the nature of their condition, they may find it challenging to independently decide on and engage in appropriate activities during unstructured periods. This can lead to feelings of restlessness, boredom, or frustration. Family members, caretakers, and other natural supports play a crucial role in helping individuals with SMI or ASD navigate these unstructured periods. They provide guidance, structure, and assistance in selecting and engaging in activities that are both meaningful and appropriate for the individual's age and developmental level. By doing so, they help individuals with SMI and ASD make the most of their unstructured time and promote their overall well-being (Summers et al, 2021).

Individuals with ASD have high rates of service utilization and high utility costs relative to those with other disabilities (Zerbo et al., 2019). Notwithstanding the aforementioned, it is worth noting that there exists substantial evidence pointing towards the existence of considerable healthcare needs that have not been adequately addressed even prior to the onset of the pandemic. These needs can be attributed to various factors at the patient level, including but not limited to challenges encountered in securing appointments and sensory issues. Similarly, factors at the provider level, such as a dearth of knowledge and training pertaining to autism spectrum disorder (ASD), have also contributed to the unmet healthcare needs. Furthermore, system-level factors, such as the limited accessibility of healthcare facilities, have imposed constraints on the provision of services and referral routes (Bradshaw et al., 2019). As a result of the turnover and shortages in staff, the closures of mandated community resources, and reduced or significantly altered access to specialized services that were essential for many individuals with Autism Spectrum Disorder (ASD), disruptions have been observed in the services that they previously relied upon prior to the onset of the pandemic. (Eshraghi et al., 2020).

### ***Services for Behavioural Health and Telehealth***

During this period, access to behavioral health services has also been significantly impacted. The provision of outpatient care and in-home services happen to have been temporarily suspended or swiftly transitioned to telehealth due to various reasons such as the ongoing pandemic or other unforeseen circumstances. Applied Behaviour Analysis (ABA) is a highly effective and evidence-based treatment approach that has been extensively researched and proven to be beneficial for individuals diagnosed with Autism Spectrum Disorder (ASD) and Significant Mental Health Issues (SMI) (Roane et al., 2016). This treatment approach is particularly effective for individuals with intellectual disabilities and/or complex communication needs, as it focuses on understanding and modifying behavior through the

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

application of scientific principles. The empirical support for ABA as a treatment for individuals with ASD and SMI is crucial in establishing its credibility and effectiveness. Numerous studies have consistently demonstrated the positive outcomes associated with ABA interventions, providing a solid foundation for its widespread use in clinical settings. These studies have shown that ABA can significantly improve various areas of functioning, including communication skills, social interactions, adaptive behaviors, and reduction of challenging behaviors. One of the key strengths of ABA is its individualized and data-driven approach. ABA practitioners carefully assess everyone's unique needs and develop personalized treatment plans based on thorough assessments and observations. This tailored approach ensures that interventions are specifically designed to address the specific challenges and goals of each individual, maximizing the effectiveness of the treatment (Giallonardo et al., 2020). Moreover, ABA interventions are characterized by their systematic and structured nature. ABA practitioners utilize various techniques and strategies, such as reinforcement. However, it is important to note that these amenities are typically provided in a face-to-face manner by providers who are geographically close to people who have Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD) and who utilize shared materials during their sessions. Converting these services to remote delivery can be difficult, as ABA frequently involves observation of behaviour that is frequently out of the range of a video camera and requires the assistance of a second household member. During the initial stages of the COVID-19 pandemic, it was observed that certain countries recognized the significance of Applied Behavior Analysis (ABA) services and classified them as "essential." However, it became apparent that many agencies offering these services were ill-equipped in terms of protective personal equipment (PPE) and regulations designed to guarantee the safety of both the providers and the individuals with Serious Mental illness (SMI) and Autism Spectrum Disorder (ASD) they served, as well as their respective households (Kornack et al., 2020). Some who switched to telehealth were aware that it was an atypical form of the service, and they may have struggled to prioritize in-person care in the face of potential dangers (Colombo et al., 2020; Cox et al., 2020).

Anecdotal evidence suggests that telephone and telehealth services have provided ongoing support for certain individuals, including children and adults, who are capable of dependable verbal communication. To mitigate the effects of COVID-19, outpatient psychiatry visits have also been converted to telepsychiatry visits on a large scale. However, providers are unable to monitor patients' vital signs, conduct any necessary physical examinations to determine the safety of potential medication trials or monitor for abnormal movements. In the field of child psychiatry, it is not uncommon to encounter cases where 5–6-year-old children are diagnosed with both serious mental illness (SMI) and autism spectrum disorder (ASD). In such instances, a common treatment approach involves the administration of typical antipsychotics to address the child's significant mood irritability. However, it is important to note that this course of treatment necessitates regular laboratory monitoring to ensure the child's well-being and safety. This monitoring process plays a crucial role in assessing the child's response to the medication and identifying any potential side effects or adverse reactions that may arise. By closely monitoring the child's laboratory results, healthcare professionals can make informed decisions regarding the continuation, adjustment, or discontinuation of the medication, ultimately aiming to optimize the child's overall mental health and quality of life. (Volkmar et al., 2014). During the height of the pandemic, however, it was not advised to visit healthcare facilities for blood tests to reduce exposure risk. The impact of the pandemic on patients care and the implementation of

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

mitigation strategies has been widely acknowledged and discussed in various studies (Badreldin and Atallah, 2020). However, it is important to note that in addition to these challenges, global drug shortages have also emerged as a significant source of concern. The issue of drug shortages has gained attention due to its potential implications on patient outcomes and healthcare systems worldwide. As highlighted by certain researchers, the scarcity of essential medications can hinder the ability of healthcare providers to effectively treat patients, especially those suffering from chronic conditions or requiring critical care. The reasons behind these drug shortages are multifaceted and complex. Factors such as disruptions in the global supply chain, increased demand for certain medications, and manufacturing challenges have all contributed to the problem (Badreldin and Atallah, 2020). Moreover, the pandemic has further exacerbated these issues, as lockdown measures and restrictions on international travel have disrupted the production and distribution of pharmaceutical products. The consequences During the initial stages of the COVID-19 pandemic, pharmaceutical companies faced challenges in meeting the rising demand for sertraline hydrochloride, a commonly prescribed medication. This shortage was primarily attributed to two factors: the surge in demand for antidepressant medications as individuals sought treatment for mental health issues exacerbated by the pandemic, and disruptions in the global supply chain. According to the U.S. Food and Drug Administration (USFDA, 2020a), drug manufacturers reported shortages of sertraline hydrochloride due to the increased demand and supply chain issues. As people grappled with the emotional toll of the pandemic, there was a significant uptick in the number of individuals seeking treatment for depression and anxiety. This surge in demand placed immense pressure on pharmaceutical companies to produce an adequate supply of certain medicines to meet the needs of patients. Due to these uncertainties, parents are increasingly concerned about the availability of necessary prescription medications in their area. The COVID-19 pandemic has posed significant challenges to the supply chain, putting all its elements at risk. One major concern is the potential direct impact on workforces. With the virus spreading rapidly, employees across various industries may fall ill, leading to a shortage of personnel and hindering the smooth functioning of the supply chain. Moreover, pandemic response measures have further complicated the situation. As governments and organizations prioritize the health and safety of their citizens and employees, resources may be redirected to support these efforts. For instance, transportation units that were previously dedicated to transporting goods within the supply chain may be reallocated to transport essential medical supplies or other critical items needed to combat the virus. These shifts in resource allocation can have a cascading effect on the supply chain, causing delays and disruptions in the movement of goods. The interconnected nature of the supply chain means that any disruption at one point can have far-reaching consequences throughout the entire system. Therefore, it is crucial for businesses to closely monitor the evolving situation and adapt their supply chain strategies accordingly. This may involve implementing contingency plans, diversifying suppliers, or exploring alternative transportation methods to mitigate the potential risks and ensure the continued flow of essential goods.

In summary, the COVID-19 pandemic has introduced unprecedented challenges to the supply chain. The direct impact on workforces and the redirection of resources as part of pandemic response measures have increased the vulnerability of the supply chain. Businesses must remain vigilant and flexible in their approach to navigate these uncertain times and maintain the resilience of their supply chain operations. I find it quite reassuring to know that the U.S. Food and Drug Administration (FDA) is actively engaged in monitoring

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

the supply chain. In fact, they have taken the initiative to request that manufacturers thoroughly evaluate their entire supply network (U.S. Food and Drug Administration [USFDA], 2020b). This demonstrates the FDA's commitment to ensuring the safety and quality of the products that reach consumers. By closely monitoring the supply chain, the FDA can identify any potential risks or issues that may arise and take appropriate action to mitigate them. This proactive approach by the FDA is crucial in maintaining the integrity of the supply chain and safeguarding public health. According to previous research, adolescents with ASD and SMI are four times more likely to visit emergency departments (ED) than adolescents without ASD and SMI, most of them are affected with ASD (Liu et al., 2017). Internalizing conditions alone, such as depression and/or anxiety, are identified as risk factors for ED visits among adolescents with ASD (Liu et al., 2019). According to a study conducted by a researcher (Mayes et al. 2015), it was found that individuals, both children and adults, who have autism spectrum disorder (ASD) are more prone to engaging in suicidal behavior. This highlights the importance of recognizing the heightened risk that individuals with ASD face in terms of their mental health. Furthermore, recent research conducted by a researcher (Ammerman et al. 2020) has provided preliminary evidence suggesting that the COVID-19 pandemic may have further exacerbated the risk of suicidal behavior among individuals with ASD. This finding sheds light on the potential impact of the pandemic on the mental well-being of this vulnerable population or population with Serious Mental Illness (SMI). It is crucial to acknowledge and address the increased risk of suicidal behavior among individuals with ASD, especially during challenging times such as the ongoing COVID-19 pandemic. By understanding these risks and implementing appropriate support systems, we can work towards ensuring the well-being and safety of individuals with ASD. As a result of the considerable disruptions experienced in daily routines and the suspension of services related to behavioral health, it is crucial to recognize that individuals with Autism Spectrum Disorder (ASD), including children, adolescents, and adults, may face an elevated risk of encountering mental health crises. Therefore, it is imperative to closely monitor and frequently assess these individuals for any emerging safety concerns that may arise.

Placement in specialized psychiatric facilities for ASD and developmental disabilities for safety and stabilization has become more difficult as a result of infection control measures implemented by many of these facilities (Li, 2020). Due to staff shortages, many U.S. psychiatric facilities have converted multiple-bed occupancy rooms to single-occupancy rooms, resulting in a decrease in available capacity. It can also be difficult for inpatient psychiatric facilities to follow recommended practices for preventing the spread of infection.

One example of a limitation of alcohol-based hand sanitizer is that it is not allowed to be used in every room due to the potential risk of ingestion. To minimize the risk of individuals being exposed to COVID-19, it is standard practice for all in-patient psychiatric facilities to carry out thorough COVID risk screenings. These screenings are designed to identify any potential cases of the virus and prevent them from entering the facility. As highlighted by a researcher (Li, 2020), these screenings may involve implementing low testing boundaries for potential referrals. This means that even individuals who display mild symptoms or have had potential exposure to the virus are carefully evaluated and tested before being admitted to the facility. While this cautious approach is crucial for ensuring the safety of both patients and staff, it can also result in a longer time to admission. However, this delay is necessary to prioritize the health and well-being of everyone involved. By implementing these rigorous

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

screening measures, inpatient psychiatric facilities are taking proactive steps to mitigate the spread of COVID-19 and maintain a safe environment for all individuals seeking care. There has been a recent emergence of various day treatments, partial hospitalization programs, and other community-based initiatives that have started incorporating telepsychiatry into their service delivery models. These innovative approaches represent a significant shift in the field of mental health, as they leverage technology to provide remote psychiatric services. However, it is important to note that despite their growing popularity, there is still limited evidence available regarding the effectiveness of these telepsychiatry interventions. These new historic implementations of telepsychiatry have gained traction due to their potential to increase access to mental health care, particularly in underserved areas where there may be a shortage of psychiatric providers. By utilizing telecommunication technologies, individuals can receive psychiatric evaluations, therapy sessions, and medication management remotely, eliminating the need for in-person visits. Day treatments, which typically involve structured therapeutic activities and support services provided during the day, have started incorporating telepsychiatry to enhance their offerings. This allows individuals to participate in group therapy sessions, receive individual counseling, and engage in other therapeutic interventions from the comfort of their own homes. (Baweja et al., 2020).

As a result of social separation and other pandemic infection control mandates, the delivery of services has undergone significant innovation and rapid adaptation. Health care, encompassing a comprehensive range of services that cater to both physical and mental well-being, has demonstrated remarkable agility in swiftly adjusting its offerings to cater to the unique requirements of the individuals it serves. During this unprecedented period, marked by the global pandemic, the utilization of telehealth services has witnessed a significant surge. This surge has brought forth a plethora of distinctive opportunities and challenges that have reshaped the healthcare landscape. (Torous & Wykes, 2020). Telehealth, telemedicine, teletherapy, and telepsychiatry are just a few of the many names for behavioral health services provided on virtual platforms. One of the key features that set these services apart is the ability for community members to conveniently access healthcare professionals through a web-based system, eliminating the need for in-person visits. There is strong evidence supporting the efficacy, feasibility, and patient preference for telehealth-delivered behavioral health services (Baweja et al, 2022.; Baweja et al., 2020). In addition to increased convenience, telehealth has many other advantages. The interruption of in-person services has resulted in delays in diagnosis and treatment access for several patients. Pre-pandemic research on the diagnostic assessment of autism through telehealth was limited (Juárez et al., 2018). In response to the pressing demand for remote healthcare services, numerous providers are currently engaged in the development of creative modifications to facilitate assessments through telehealth services (Narzisi, 2020b; Sanchez & Constantino, 2020, Sutantio et al 2020; UCLA 2020; Wagner et al. 2020). These adaptations are being implemented to ensure that individuals can receive the necessary evaluations and diagnoses without the need for in-person visits. The efforts of these providers reflect the growing recognition of the potential of telehealth in delivering comprehensive healthcare services, particularly in the field of assessments. By leveraging technology and innovative approaches, healthcare professionals are striving to overcome the limitations imposed by physical distance and provide accessible and efficient assessments remotely. The studies and institutions mentioned above serve as valuable sources of information and inspiration for these ongoing developments in the field of telehealth assessments. While it is true that research on the validity of assessment modifications in light of the pandemic is still in its



## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

early stages, it is worth noting that many professionals are actively embracing evidence-based tools to address the healthcare constraints imposed by the current situation.

Telehealth has become an indispensable resource for many, as the availability and capacity of providers and health systems for in-person care delivery have been severely constrained by the pandemic. Telehealth is a revolutionary healthcare solution that offers individuals who would otherwise encounter obstacles in accessing care, such as residents of rural communities, patients facing travel difficulties, and homebound patients, the invaluable opportunity to receive immediate and efficient medical assistance. By leveraging technology and digital platforms, telehealth has successfully bridged the gap between patients and healthcare providers, ensuring that no one is left behind when it comes to receiving the care they need. One of the key advantages of telehealth is its ability to reach individuals residing in rural communities. These areas often lack sufficient healthcare infrastructure, making it challenging for residents to access medical services in a timely manner. (Baweja et al, 2022) However, with telehealth, patients living in remote locations can now connect with healthcare professionals through virtual consultations, eliminating the need for long and arduous journeys to the nearest healthcare facility. This not only saves patients valuable time and resources but also ensures that they receive the necessary care without any unnecessary delays. Transportation difficulties can also pose a significant barrier to healthcare access for many individuals. Whether it's due to limited public transportation options, physical disabilities, or financial constraints, getting to a healthcare facility can be a daunting task for some patients. However, telehealth continues to have several limitations, such as its reliance on technology, which can be unreliable, especially during times of high demand, such as during the pandemic. Telehealth, which refers to the use of technology to provide healthcare services remotely, may pose challenges for patients who are socioeconomically or technologically disadvantaged. These individuals may face difficulties in accessing telehealth services due to various reasons related to their socioeconomic status or lack of technological resources. (Ramirez et al., 2020).

Existing research on the efficacy of telehealth for individuals with ASD is contradictory (Hepburn et al., 2016; Knutsen et al., 2016). Telehealth has been positively received by both ASD youth and their parents. However, the provision of these services has been hindered by various technical issues that have arisen. (Hepburn et al., 2016). Despite these obstacles, telehealth remains a viable option for individuals with ASD when face-to-face interactions are impossible or impractical. Tele-services, also known as telecommunication services, possess the remarkable potential to offer a wide array of invaluable services to individuals who have been diagnosed with Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD). These services encompass a range of essential support, including but not limited to individual therapy sessions, family consultations, transfer of skills and maintenance, as well as tackling behavioral challenges and communication needs. (Baweja et al, 2022; Dal Pai et al, 2022).

### ***Preparing for Future***

Over the past two decades, our world has witnessed a series of global health emergencies that have had significant impacts on our society. These include outbreaks such as SARS, ZIKA, Swine flu, and most recently, the novel coronavirus pandemic. It is important to acknowledge that these events have shaped our understanding of public health and have provided valuable lessons for the foreseeable future. Given the complex nature of our

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

interconnected world, it is highly probable that we will encounter similar situations in the years to come. Therefore, it is crucial for us to remain vigilant and prepared, drawing upon the knowledge and experiences gained from these past emergencies (Morens et al., 2020).

Throughout the ongoing global pandemic, health services systems and dedicated professionals in the field of behavioral medicine have demonstrated an unwavering commitment to addressing the unique and unprecedented challenges that have arisen. In the face of this novel crisis, these individuals have worked tirelessly, utilizing their expertise and knowledge to navigate the uncharted territory of the pandemic and its impact on mental health and well-being. Their efforts have been nothing short of remarkable, as they have adapted and evolved their approaches to meet the evolving needs of patients and communities. Amid this crisis, healthcare systems have faced numerous obstacles, including limited resources, increased demand for services, and the need to implement new protocols and safety measures. Despite these challenges, healthcare professionals have remained steadfast in their unwavering commitment, which has remained steadfast and resolute, has been laser-focused and dedicated to the noble cause of ensuring the delivery of optimal care for those who find themselves in the most vulnerable positions within our society (Myers et al, 2015).

The advent of telehealth has brought about a significant revolution in the way we connect with and provide essential services to individuals who are in dire need of them. This innovative approach to healthcare delivery has completely transformed the traditional methods of accessing medical care, making it more convenient and accessible for patients. Telehealth, also known as telemedicine, utilizes modern technology to bridge the gap between healthcare providers and patients, regardless of their geographical location. Using video conferencing, remote monitoring devices, and secure online platforms, individuals can now receive medical consultations, diagnoses, and even treatment from the comfort of their own homes. This revolutionary shift in healthcare delivery has numerous benefits. Firstly, telehealth eliminates the need for patients to travel long distances to access specialized care. By leveraging the power of technology, telehealth has not only simplified but also enhanced the convenience of communication and service provision. According to Stock et al. (2022), it has been suggested that telehealth-based behavioral and mental health services have the potential to provide valuable support to individuals in various aspects.

These services can aid individuals in effectively navigating and processing the challenges brought about by environmental changes. Additionally, they can help individuals in adapting to a new normal and develop strategies for successfully reintegrating back into society. Continuing our commitment to emergency preparedness efforts has the potential to ignite a wave of creativity and ingenuity in tackling the obstacles of upholding essential services, all the while enhancing our ability to adapt and bounce back in the face of future crises. By persistently investing in preparedness, we can foster an environment that encourages the development of innovative approaches to address the multifaceted challenges that lie ahead. This unwavering dedication to preparedness not only ensures the continuity of crucial services but also empowers us to build a stronger foundation of resilience, enabling us to navigate future crises with greater efficacy and confidence. To successfully tackle the present situation, it is crucial to prioritize accelerating the growth of telehealth services. This means focusing on the development and implementation of comprehensive guidelines that outline the best possible use of these platforms. By doing so, we can ensure that telehealth

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

services are utilized to their full potential, benefiting both healthcare providers and patients alike. (Torous & Wykes, 2020). By doing so, we can ensure that individuals have increased access to the necessary interventions and support they require, particularly during these challenging times.

The use of telehealth services, which permit consultations and treatments to take place over long distances, has proven to be an effective means of closing this gap. However, in order to maximize the potential benefits of telehealth, it is imperative that we develop clearer and more detailed guidance on how to effectively navigate and utilize these platforms. This will not only enhance the overall quality of care provided but also ensure that both patients and healthcare professionals are equipped with the necessary knowledge and skills to make the most out of telehealth services. By expanding Establishing a safe and inspiring environment is of utmost importance. It is crucial to ensure that individuals feel secure and supported in their surroundings. When individuals feel safe, they are more likely to take risks, express themselves freely, and engage in meaningful interactions.

As a result, this helps to create an environment that is upbeat and encouraging, which is optimal for one's own growth and development. Therefore, it is essential to prioritize the Previous research that has demonstrated that individuals with disabilities are significantly more vulnerable to the impacts of emergencies, as evidenced by various past disasters. According to Neece et al. (2020), the worldwide ramifications of the COVID-19 pandemic have significantly affected various essential services that are crucial for individuals with Autism Spectrum Disorder (ASD). Given the current circumstances, it is of utmost importance to acknowledge the heightened vulnerability of individuals with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI).

Considering this, it becomes imperative to emphasize the significance of emergency preparedness. By proactively planning for potential further outbreaks of the ongoing pandemic or any future health emergencies and natural disasters, we can ensure that the people who are particularly vulnerable continue to receive the critical behavioral health and assistance services they require (Yang et al., 2023).

The advent of telehealth has brought about a paradigm shift in healthcare, enabling healthcare professionals to reach patients in remote areas and provide them with the care they need, regardless of geographical barriers. This has been particularly beneficial for individuals who are unable to access traditional healthcare services due to various reasons such as physical disabilities, lack of transportation, or living in rural areas with limited healthcare facilities. The integration of telehealth into the healthcare system has opened up a world of possibilities, allowing patients to receive timely medical advice, diagnosis, and treatment from the comfort of their own homes. Through video consultations, patients can connect with healthcare providers and discuss their symptoms, concerns, and medical history, enabling healthcare professionals to make informed decisions about their care. This not only saves time and resources but also reduces the burden on healthcare facilities, ensuring that those who require immediate help, can avail it. The advent of telehealth has not only simplified the process but has also significantly enhanced the convenience factor, making it a game-changer in the field of healthcare. Some researchers (Davide et al., 2020) claim that people who receive ongoing telehealth services for mental and behavioral health are better able to deal with the challenges presented by the constant environmental shifts

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

they face. This includes helping them adjust to a new normal and adequately prepare for their eventual reintegration into the community. In the foreseeable future, the continuous and unwavering commitment to emergency preparedness initiatives may serve as a catalyst for the emergence of increasingly innovative and imaginative approaches to address the multifaceted obstacles associated with upholding essential services during times of crisis. These concerted efforts not only aim to ensure the seamless functioning of vital systems but also strive to enhance the capacity for adaptation and fortitude in the face of future adversities. By harnessing the lessons learned from past experiences, the collective determination to safeguard communities and mitigate the impact of unforeseen events is poised to inspire a wave of ingenious solutions that transcend conventional boundaries.

Through a harmonious blend of foresight, resourcefulness, and collaboration, the trajectory of emergency preparedness endeavors is poised to chart a course towards a future characterized by resilience, preparedness, and the ability to navigate through any challenges that may arise. In order to effectively address the current healthcare challenges, it is imperative to prioritize the expansion of telehealth availability and simultaneously focus on the development of clearer guidance on how to optimally utilize these platforms for intervention (Torous & Wykes, 2020). By doing so, we can ensure that individuals have greater access to the necessary healthcare services, regardless of their geographical location or physical limitations. This expansion of telehealth availability will not only enhance convenience and flexibility for patients but will also alleviate the burden on healthcare facilities, allowing them to allocate their resources more efficiently (Baweja et al.2022). Moreover, by providing clearer guidance on how to best utilize telehealth platforms for intervention, we can empower healthcare professionals to deliver high-quality care remotely, while maintaining the same level of effectiveness as traditional in-person interventions. This will require a collaborative effort between healthcare providers and policymakers.

Before the onset of the worldwide pandemic, some specific limitations and constraints affected the use of telehealth in the fields of mental health and psychiatry. These restrictions posed significant challenges for practitioners throughout the United States, preventing them from integrating telehealth services into their everyday practice (Baweja et al.2022). In response to the urgent need for remote healthcare services, mental health providers were faced with the formidable task of swiftly and seamlessly incorporating telehealth into their practice. Given the prevailing circumstances that we find ourselves in, it becomes increasingly imperative to underscore and highlight the significance of upholding and guaranteeing prevalent access to telehealth services. This is particularly significant for our vulnerable community members, such as individuals with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI).

By maintaining and expanding telehealth services, we can effectively address the unique needs and challenges faced by these individuals. Telehealth services have proven to be a valuable resource, especially during these unprecedented times. They offer a convenient and accessible means of receiving healthcare services remotely, eliminating the barriers of distance and transportation. For individuals with ASD and SMI, who may face difficulties with mobility or have limited access to specialized care, telehealth provides a lifeline to essential support and treatment. By utilizing telehealth services, individuals diagnosed with Autism Spectrum Disorder (ASD) and SMI have the opportunity to access vital therapy sessions and assessments. It is our sincere hope that the different organizations responsible

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

for governing the provision of behavioral health services in countries, such as state funding agencies, licensing boards, accreditation bodies, and insurance firms, will wholeheartedly embrace and recognize the widespread acceptance of telehealth as a permanent and indispensable aspect of healthcare delivery.

This sentiment extends beyond the current pandemic and encompasses situations where in-person access may be limited due to various factors such as an individual's environment, conditions, or context. It is our fervent desire that these regulatory bodies recognize the immense value and convenience that telehealth brings to patients, enabling them to receive the necessary care and support regardless of physical proximity. It is possible for us to guarantee that people who are in need of mental health services will have equal access to care despite their circumstances if we accept telecommuting as the new standard and make it our norm. This will ultimately lead to the implementation of the most effective and efficient practices, as well as the development and utilization of advanced technology and evidence-based approaches, as highlighted by the studies conducted by a few scientists (Yang et al. in 2023, Baweja et al. in 2022)

The ongoing global pandemic has undeniably brought to the forefront the importance of fostering substantial collaboration among various parties involved in the care and support of people with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI). This includes caretakers, friends and family, behavioral healthcare providers, and other stakeholders who all share a vested interest in promoting the overall well-being of these individuals, particularly during times when the demand for their services is significantly heightened. Persons identified with Autism Spectrum Disorder (ASD) are a diverse group of people who have actively engaged in collaborative efforts to address vulnerabilities throughout society as an entirety (Eidson et al., 2020). ASD is a condition that affects individuals in various ways, and it is characterized by challenges in social interaction, communication, and repetitive behaviors. Despite these challenges, many individuals with ASD have made significant contributions to society through their active participation in initiatives aimed at addressing vulnerabilities and promoting inclusivity. These collaborative efforts have been instrumental in raising awareness about the unique needs and strengths of individuals with ASD, and have paved the way for the development of programs and policies that support their integration and well-being. The involvement of individuals with ASD in these collaborative endeavors highlights their resilience, determination, and commitment to making a positive impact on society. By actively participating in these efforts, individuals with ASD have not only contributed to their own personal growth and development, but have also played a crucial role in fostering a more inclusive and understanding society for everyone. There are a multitude of international, domestic, and regional groups that have recognized and highly regarded these essential needs. These organizations have worked tirelessly to create and compile a wealth of invaluable resources for caregivers, families, and people with autism equally (Autism Speaks, 2020a).

Individuals diagnosed with Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD) have expressed a preference for resources that are prioritized based on their ability to comprehend and assimilate information easily. In order to effectively convey key messages, it may be necessary to repeat them frequently. In addition to the aforementioned strategies, it can be highly advantageous to incorporate innovative formats such as informational graphics, illustrations, online communities, and social stories into your communication

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

efforts. These modern tools have proven to be effective in conveying information and engaging audiences in a more dynamic and interactive manner. By utilizing infographics, you can present complex data and concepts in a visually appealing and easily digestible format, making it easier for your audience to understand and retain the information. Visuals, such as images, videos, and animations, can also enhance your in order to ensure the effectiveness and relevance of the resources being developed, it is crucial to actively involve individuals who have Autism Spectrum Disorder (ASD) in the entire process. Their valuable insights and perspectives can provide invaluable guidance and contribute to the creation of resources that truly meet their needs. By actively seeking the ongoing feedback of individuals with ASD, we can continuously improve and refine the resources to better address their unique challenges and requirements. Their lived experiences and firsthand knowledge of the disorder can offer invaluable insights that may not be fully understood by those without ASD. Involving individuals with ASD and SMI in the development process also promotes inclusivity and empowers them to have a voice in shaping the resources that are intended to support them. It is essential to recognize their expertise and respect their autonomy, ensuring that their input is not only sought but also genuinely considered. Their active participation is crucial in order to enhance the effectiveness of the messaging and increase the chances of achieving the desired outcome. According to the research performed by some scientists (Nuñez, A.2021).

It is of utmost importance to adequately equip individuals with the necessary skills and knowledge to effectively adapt to and navigate through environmental changes. According to a study conducted by researcher (Hodgson et al. in 2017), it was found that a considerable proportion of individuals diagnosed with Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD) face challenges when it comes to dealing with uncertainty, change, and new experiences. This observation highlights the importance of understanding and addressing the specific needs of these individuals in order to provide them with appropriate support and interventions. Behavioral health providers have a unique and valuable opportunity to assist individuals in anticipating and planning for their progressive reintegration into society, as well as preparing for any possible future commonality constraints or unforeseen emergencies that may arise.

In order to effectively address solving problems, the verification of alternative options, and the excitement of conclusions within the framework of daily events, it is crucial for mental health professionals to engage in working together efforts with both children and adults. This collaboration allows for a comprehensive approach that takes into account the unique perspectives and experiences of individuals across different age groups. By working together with children and adults, mental health professionals can tap into a wealth of knowledge and insights that can contribute to more effective problem-solving. Children, for instance, may offer fresh perspectives and creative solutions that adults may not have considered. Their unique way of thinking can bring about innovative approaches to addressing challenges. Similarly, adults bring their own set of experiences and wisdom to the table. They have encountered a wide range of situations throughout their lives and have developed coping mechanisms and problem-solving skills that can be shared with mental health professionals. This exchange of knowledge and expertise can greatly enhance the problem-solving process. Furthermore, collaborative efforts between mental health professionals and both children and adults can help in the verification of alternative options. Each individual may have different ideas and suggestions for potential solutions, and by working together, a wider

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

range of possibilities can be formulated. The cultivation of the capacity to formulate an alternative course of action, commonly referred to as a "plan B," if initial plans encounter disruptions or fail to meet expectations, is a crucial skill to develop. The unwavering commitment and persistent application of energy in circumstances that are devoid of emergencies or urgent matters play a crucial role in fostering the development of resilience and self-assurance. This, in turn, equips individuals with the necessary tools to confront and navigate ambiguity when it inevitably presents itself (Baweja et al, 2022).

There has been significant development of numerous collaborative resources that are primarily focused on tackling the various challenges that arise from handling anxiety as well as navigating the state of disorientation that is brought due to a crisis (Autism Speaks, 2020a). In a similar vein, it was noticed that individuals with the diagnosis of autism spectrum disorder (ASD) or Severe Mental illness (SMI) may continuously encounter extreme stress or symptoms of post-traumatic stress disorder, or PTSD, regardless of the conclusion of the ongoing global epidemic. This observation highlights the unique challenges faced by individuals with ASD or SMI, as they may experience heightened levels of stress and anxiety in response to various situations. The impact of the pandemic on individuals with ASD and SMI has been a topic of concern, as the disruption of routines and social interactions can exacerbate their symptoms. Furthermore, the prolonged period of uncertainty and fear during the pandemic may have contributed to the development or worsening of PTSD symptoms in individuals with ASD or SMI. It is crucial to recognize and address these challenges to ensure the well-being and mental health of individuals with ASD and SMI in the post-pandemic period. (Kildahl et al. 2020). Over the course of the past ten years, a multitude of researchers and various organizations have dedicated their efforts toward the comprehensive examination and implementation of training programs. These programs have been meticulously crafted with the sole purpose of offering invaluable support to community first responders. Their primary objective is to enhance the responders' capacity to accurately recognize and defuse potentially challenging scenarios involving people who have autism who might be experiencing distress (Beardon et al., 2018; Railey et al., 2020; Love et al., 2020; Autism Speaks, 2020b).

Consistent efforts to educate community service providers and other relevant personnel on effective methods of recognizing and alleviating acute stress reactions in autistic people are crucial (Love et al., 2020). Adults and children with autism will receive special attention in the future so that they can learn the skills they need to live independently. Delivering guidance along with chances to perform in a non-anxious or non-crisis attaining is widely acknowledged as an especially successful method to teach and cultivate coping skills (Mupaku et al. 2021).

This approach enables individuals to acquire and internalize these skills more readily, thereby facilitating their prompt utilization when confronted with challenges or difficulties. The implementation of endured focus and innovative educational approaches, which are specifically designed to enhance resilience and coping abilities, can play a crucial role in preparing people confirmed with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI) for unforeseen future adversities. By incorporating these approaches into their educational programs, individuals with ASD and SMI can develop the necessary skills and strategies to navigate challenges and setbacks that may arise in their lives. Resilience, the ability to bounce back from difficult situations, is a valuable trait for individuals with ASD

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

and SMI. It enables them to adapt to changes, overcome obstacles, and maintain a positive outlook despite the challenges they may face. By focusing on sustained efforts to build resilience, educational programs can empower individuals with ASD and SMI to develop a strong sense of self-efficacy and confidence in their abilities to handle adversity. In addition to resilience, coping abilities are equally important for individuals with ASD and SMI. Coping skills enable them to effectively manage stress, regulate emotions, and maintain their overall well-being. By implementing innovative educational approaches that specifically target the development of coping abilities, individuals with ASD and SMI can acquire a diverse range of strategies to navigate various situations and cope with the demands of everyday life. Moreover, such strategies have the potential to instill a sense of empowerment daily, thereby rendering them highly valuable for inclusion in treatment regimens or personal growth plans.

Ensuring the provision of an atmosphere of security and encouragement is of utmost importance. A significant number of caregivers and parents have found themselves suddenly shouldering the responsibilities of multiple providers, all while juggling their own work and various other obligations. This situation has shed light on areas of great necessity when considering enhancements in the delivery and design of services (Sen.S,2022). A considerable number of individuals diagnosed with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI) place great importance on adhering to routines. However, it is often observed that the educational approach primarily emphasizes the adherence to routines rather than the development of essential skills. To promote independence and the ability to initiate tasks, it is crucial to implement a routine and strategy that is both self-determining and effective. This approach offers a wider range of options and reinforcement for the development or modification of routines. Additionally, it facilitates the teaching of self-management skills for daily planning (Hume et al. 2009).

Due to the fact that numerous educational institutions and professional environments are currently not operating at full capacity, a significant number of individuals have encountered a notable augmentation in the amount of unstructured leisure time available to them. It has been observed that a significant number of individuals with Autism Spectrum Disorder (ASD) face challenges in terms of both the quantity and effective management of their leisure time (Armendariz and Hahs, 2019). It has been observed that individuals diagnosed with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI) may possess a restricted range of leisure skills within specific areas (Hochhauser & Engel-Yeager, 2010). The importance of providing clear and specific guidance in teaching a wide range of distinct leisure skills as well as options across various domains cannot be overstated. These domains encompass activities such as engaging in physical exercise, participating in non-electronic pastimes, practicing relaxation techniques, and pursuing enjoyable hobbies. It is disheartening to observe the frequent absence of this essential component within educational and behavioral health curricula. This particular aspect warrants further attention and enhancement in order to effectively equip oneself for unforeseen circumstances, while concurrently fostering a greater sense of self-reliance and autonomy (Baweja et al., 2022).

Educational institutions, including schools and vocational programs, stand to derive significant advantages from the continued implementation of diverse teaching methodologies and active student engagement. There are already numerous online as well as computer-based learning programs that are readily accessible. It is crucial to emphasize the significance of acquiring



## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

expertise and reinforcement with this particular curriculum, both within the classroom setting and in various other environments such as the community. In addition to the aforementioned point, it is crucial to recognize and give due consideration to the fact that the incorporation of virtual learning within the confines of students' home environments can potentially play a significant role in augmenting their capacity to apply and transfer the knowledge and skills they have acquired through this particular mode of education to various different settings (Khowaja et al., 2020). In order to address the issue of regression that may occur during periods of unemployment and improve the employment opportunities for older individuals who suffer from ASD or SMI, vocational programs should consider implementing and strengthening domestic assignments that are directly related to relevant occupational skills. When external support and structure are no longer accessible, it can indeed pose a significant challenge to maintain productivity and a sense of purpose. (Sen.S, 2022).

Preparing people for changes in their environment is critical; many people with ASD struggle to tolerate uncertainty, change, and novelty (Hodgson et al., 2017). Behavioral health providers have an important role to play in assisting individuals in anticipating and planning for gradual reintegration into the community, as well as planning for possible future community restrictions or other emergencies (Baweja et al, 2022). Working with children and adults on problem-solving, identifying alternate options, and predicting outcomes in the context of daily events is something that mental health professionals can and should do (Sen.S, 2022). Essentially, developing the ability to create the proverbial "plan B" if plans are disrupted or expectations are not met. This continuous focus and effort in non-crisis situations help to build resilience and confidence to deal with uncertainty when it inevitably arrives. (Scheeren et al.,2022)

### **CONCLUSION**

The recent pandemic, which has had a profound impact on societies worldwide, has unequivocally highlighted the glaring inadequacies of global emergency preparedness. This is especially true when it comes to addressing the needs of vulnerable populations, including individuals with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI). The unprecedented challenges posed by the pandemic have exposed the existing gaps in our ability to effectively protect and support these individuals during times of crisis. The COVID-19 pandemic has brought to light various inadequacies in the delivery of services, particularly in terms of prioritizing abilities over individuals with significant needs and exceptional potential. In order to effectively address emergency preparedness, it is crucial for state, local, national, and international authorities to thoroughly consider and incorporate the unique requirements of individuals with Autism Spectrum Disorder (ASD) and Serious Mental Illness (SMI). These individuals may face distinct challenges and vulnerabilities during emergency situations, which necessitates a comprehensive approach that caters to their specific needs. At the state level, emergency preparedness measures should be designed to accommodate the diverse range of individuals with ASD and SMI residing within the state's jurisdiction. This entails conducting thorough assessments to identify the specific needs and capabilities of this population, as well as developing targeted strategies to address any potential gaps in emergency response plans. By tailoring emergency prepared It is of utmost importance to encourage individuals, parents, and all care providers, as well as associations and providers of services, to embrace innovation and actively engage in preparing themselves for potential employment in environments that are experiencing swift and dynamic transformations. Involving individuals with Serious Mental Illness (SMI) and

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

Autism Spectrum Disorder (ASD), especially those from the ASD community, in continuous and meaningful dialogues regarding the ways in which they can contribute to the improvement and advancement of these measures is of utmost importance. This inclusive approach ensures that their unique perspectives, experiences, and insights are taken into account, fostering a collaborative environment that encourages innovation and progress. By actively engaging SMI and ASD participants in ongoing conversations, we create a space where their voices are heard, valued, and respected, ultimately leading to more effective and impactful measures that address their specific needs and challenges. This collaborative effort not only enhances the quality of these measures but also promotes inclusivity, empowerment, and a sense of ownership among the SMI and ASD communities.

### **REFERENCES**

- Ahmed M.Z., Ahmed O., Aibao Z., Hanbin S., Siyu L., Ahmad A. Epidemic of COVID-19 in China and associate Psychological Problem. *Asian J. Psychiatry*. 2020;51 doi: 10.1016/j.ajp.2020.102092.
- Aiello AE. Invited commentary: evolution of social networks, health, and the role of epidemiology. *Am J Epidemiol*. 2017; 185:1089–92.
- American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 5th ed. Arlington: American Psychiatric Publishing, 2013
- Ammerman, B. A., Burke, T. A., Jacobucci, R., & McClure, K. (2020). Preliminary investigation of the association between COVID-19 and suicidal thoughts and behaviors in the US. *Journal of Psychiatric Research*. <https://doi.org/10.1016/j.jpsychires.2020.12.037>
- Armendariz, V., & Hahs, A. D. (2019). Teaching leisure activities with social initiations through video prompting. *Journal of Behavioral Education*, 28(4), 479–492
- Autism Speaks. (2020a). COVID-19 (coronavirus) information and resources. Retrieved December 29, 2020 from <https://www.autismspeaks.org/covid-19-information-and-resources>.
- Autism Speaks. (2020b). Information for First Responders. Retrieved December 29, 2020 from <https://www.autismspeaks.org/information-first-responders>.
- Badreldin, H. A., & Atallah, B. (2020). Global drug shortages due to COVID-19: Impact on patient care and mitigation strategies. *Research in Social & Administrative Pharmacy* <https://doi.org/10.1016/j.sapharm.2020.05.01704950-9>
- Baweja, R., Verma, S., Pathak, M., & Waxmonsky, J. G. (2020). Development of a child and adolescent tele-partial hospitalization program (tele-PHP) in response to the COVID-19 pandemic. *The Primary Care Companion for CNS Disorders*. <https://doi.org/10.4088/PC.20m02743>
- Beardon, L., Chown, N., & Cossburn, K. (2018). First responders and autism. In F. Volkmar (Ed.), *Encyclopedia of autism spectrum disorders*. Springer. [https://doi.org/10.1007/978-1-4614-6435-8\\_102159-1](https://doi.org/10.1007/978-1-4614-6435-8_102159-1)
- Bradshaw, P., Pellicano, E., van Driel, M., & Urbanowicz, A. (2019). How can we support the healthcare needs of autistic adults without intellectual disability? *Current Developmental Disorders Reports*, 6(2), 45–56. <https://doi.org/10.1007/s40474-019-00159-9>
- Brooks S.K., Webster R.K., Smith L.E., Woodland L., Wessely S., Greenberg N., Rubin G.J. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*. 2020; 395:912–920. doi: 10.1016/S0140-6736(20)30460-8.
- Cariou, B., Hadjadj, S., Wargny, M., Pichelin, M., Al-Salameh, A., Allix, I., et al. (2020). Phenotypic characteristics and prognosis of inpatients with COVID-19 and diabetes: the CORONADO study. *Diabetologia*. <https://doi.org/10.1007/s00125-020-05180-x>

**The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

- Centers for Disease Control and Prevention. (2020, April 7). Coronavirus disease 2019 (COVID-19): People with disabilities. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-disabilities.html>
- Centers for Disease Control and Prevention. (2020, December 29). COVID-19 and your health: People with certain medical conditions. Centers for Disease Control and Prevention.
- Chen, M. H., Lan, W. H., Hsu, J. W., Huang, K. L., Su, T. P., Li, C. T., et al. (2016). Risk of developing type 2 diabetes in adolescents and young adults with autism spectrum disorder: A nationwide longitudinal study. *Diabetes Care*, 39(5), 788–793
- Cidav, Z., Lawer, L., Marcus, S. C., & Mandell, D. S. (2013). Age-related variation in health service use and associated expenditures among children with autism. *Journal of Autism and Developmental Disorders*, 43(4), 924–931.
- Colombo, R. A., Wallace, M., & Taylor, R. (2020). An essential service decision model for ABA providers during crisis. *Behavior Analysis in Practice*, 1, 306–311. <https://doi.org/10.1007/s40617-020-00432-z>
- Constantino, J. N., Sahin, M., Piven, J., Rodgers, R., & Tschida, J. (2020). The impact of COVID-19 on individuals with intellectual and developmental disabilities: Clinical and scientific priorities. *American Journal of Psychiatry*. <https://doi.org/10.1176/appi.ajp.2020.20060780>
- Ćosić K, Popović S, Šarlija M, Kesedžić I. Impact of human disasters and COVID-19 pandemic on mental health: potential of digital psychiatry. *Psychiatr Danub*. 2020; 32:25–31
- Courtenay, K., & Perera, B. (2020). COVID-19 and people with intellectual disability: Impacts of a pandemic. *Irish Journal of Psychological Medicine*, 37(3), 231–236. <https://doi.org/10.1017/ipm.2020.45>
- Cox, D. J., Plavnick, J. B., & Brodhead, M. T. (2020). A proposed process for risk mitigation during the COVID-19 pandemic. *Behavior Analysis in Practice*. <https://doi.org/10.1007/s40617-020-00430-1>
- d, Le Roy, C., Coelho-Medeiros, M. E., & López-Espejo, M. (2021). Factors affecting the behavior of children with ASD during the first outbreak of the COVID-19 pandemic. *Neurological Sciences*, 42(5), 1675–1678. <https://doi.org/10.1007/s10072-021-05147-9>
- Dal Pai, J., Wolff, C.G., Aranchipe, C.S. et al. COVID-19 Pandemic and Autism Spectrum Disorder, Consequences to Children and Adolescents— a Systematic Review. *Rev J Autism Dev Disord* (2022). <https://doi.org/10.1007/s40489-022-00344-4>
- Daniel, H., & Butkus, R. (2015). Lesbian, gay, bisexual, and transgender health disparities: Executive summary of a policy position paper from the American College of Physicians. *Annals of Internal Medicine*, 163(2), 135–137.
- Davide P, Andrea P, Martina O, Andrea E, Davide D, Mario A. The impact of the COVID-19 pandemic on patients with OCD: effects of contamination symptoms and remission state before the quarantine in a preliminary naturalistic study. *Psychiatry Res*. (2020) 291:113213. doi: 10.1016/j.psychres.2020.113213
- de Girolamo G, Cerveri G, Clerici M, Monzani E, Spirogatti F, Starace F, et al. Mental health in the Coronavirus Disease 2019 emergency—the Italian response. *JAMA Psychiatry*. 2020 Apr 30 <http://10.1001/jamapsychiatry.2020.1276>. Online ahead of print.
- de Sousa Lima, M. E., Barros, L. C. M., & Aragão, G.F. (2020). Could autism spectrum disorders be a risk factor for COVID-19? *Medical Hypotheses*. <https://doi.org/10.1016/j.mehy.2020.109899>
- Diaz, A. D., & Baweja, R. (2020). The role of neurotropism in psychiatric patients with COVID-19. *European Archives of Psychiatry and Clinical Neuroscience*. <https://doi.org/10.1007/s00406-020-01197-w>

**The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

- Dotson, W. H., Leaf, J. B., Sheldon, J. B., & Sherman, J. A. (2010). Group teaching of conversational skills to adolescents on the autism spectrum. *Research in Autism Spectrum Disorders*, 4(2), 199–209
- Druss BG. (2020) Addressing the COVID-19 pandemic in populations with serious mental illness. *JAMA Psychiatry*. doi: 10.1001/jamapsychiatry.2020.0894
- Dunn, K., Rydzewska, E., Macintyre, C., Rintoul, J., & Cooper, S. A. (2019). The prevalence and general health status of people with intellectual disabilities and autism co-occurring together: A total population study. *Journal of Intellectual Disability Research*, 63(4), 277–285.
- Duygu Kaba, Jamal Hasanlı, Ayşegül Efe, Meriç Yavuz-Çolak & Burcu Akin-Sarı (2022) Predictors of burnout and distress in parents of children with autism spectrum disorder during COVID-19 home confinement, *Children's Health Care*, DOI: 10.1080/02739615.2022.2119974
- Eidson, T., Hess, A., Hess, T., & Kelly, A. (2020). Family engagement in the autism treatment and learning health networks. *Pediatrics*, 145(Supplement 1), S30–S34.
- Eshraghi, A. A., Li, C., Alessandri, M., Messinger, D. S., Eshraghi, R. S., Mittal, R., & Armstrong, F. D. (2020). COVID-19: Overcoming the challenges faced by individuals with autism and their families. *The Lancet. Psychiatry*, 7(5), 481–483. [https://doi.org/10.1016/S2215-0366\(20\)30197-8](https://doi.org/10.1016/S2215-0366(20)30197-8)
- Galea, S., Merchant, R. M., & Lurie, N. (2020). The mental health consequences of COVID-19 and physical distancing: The need for prevention and early intervention. *JAMA Internal Medicine*, 180(6), 817. <https://doi.org/10.1001/jamainternmed.2020.1562>
- Giallonardo, V., Sampogna, G., Del Vecchio, V., Luciano, M., Albert, U., Carmassi, C., et al. (2020). The impact of quarantine and physical distancing following COVID-19 on mental health: Study protocol of a multicentric Italian population trial. *Frontiers in Psychiatry*, 11, 533. <https://doi.org/10.3389/fpsy.2020.00533>
- Gobbi S, Plomecka MB, Ashraf Z et al (2020) Worsening of preexisting psychiatric conditions during the COVID-19 pandemic. <https://doi.org/10.1101/2020.05.28.20116178>
- Gosling, C.J.; Cartigny, A.; Mellier, B.C.; Solanes, A.; Radua, J.; Delorme, R. Efficacy of Psychosocial Interventions for Autism Spectrum Disorder: An Umbrella Review. *Mol. Psychiatry* 2022.
- Hepburn, S. L., Blakeley-Smith, A., Wolf, B., & Reaven, J. A. (2016). Telehealth delivery of cognitive-behavioral intervention to youth with autism spectrum disorder and anxiety: A pilot study. *Autism*, 20(2), 207–218. <https://doi.org/10.1177/1362361315575164>
- Hochhauser, M., & Engel-Yeger, B. (2010). Sensory processing abilities and their relation to participation in leisure activities among children with high-functioning autism spectrum disorder (HFASD). *Research in Autism Spectrum Disorders*, 4(4), 746–754.
- Hodgson, A. R., Freeston, M. H., Honey, E., & Rodgers, J. (2017). Facing the unknown: Intolerance of uncertainty in children with an autism spectrum disorder. *Journal of applied research in intellectual disabilities*, 30(2), 336–344.
- Howlin, P., Moss, P., Savage, S., & Rutter, M. (2013). Social outcomes in mid-to later adulthood among individuals diagnosed with autism and average nonverbal IQ as children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 52(6), 572–581. [https://www.who.int/health-topics/mental-health#tab=tab\\_3](https://www.who.int/health-topics/mental-health#tab=tab_3)
- Huang, Y., & Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: A web-based cross-sectional survey. *Psychiatry Research*. <https://doi.org/10.1016/j.psychres.2020.112954>
- Hume, K., Loftin, R., & Lantz, J. (2009). Increasing independence in autism spectrum disorders: A review of three focused interventions. *Journal of Autism and Developmental Disorders*, 39(9), 1329–1338

**The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

- Jeste, S., Hyde, C., Distefano, C., Halladay, A., Ray, S., Porath, M., Wilson, R. B., & Thurm, A. (2020). Changes in access to educational and healthcare services for individuals with intellectual and developmental disabilities during COVID-19 restrictions. *Journal of Intellectual Disability Research*, 64(11), 825–833. <https://doi.org/10.1111/jir.12776>
- Jones, K. B., Cottle, K., Bakian, A., Farley, M., Bilder, D., Coon, H., & McMahon, W.M. (2016). A description of medical conditions in adults with autism spectrum disorder: A follow-up of the 1980s Utah/UCLA Autism Epidemiologic Study. *Autism*, 20(5), 551–561. <https://doi.org/10.1177/1362361315594798>
- Juárez, A. P., Weitlauf, A. S., Nicholson, A., Pasternak, A., Broderick, N., Hine, J., et al. (2018). Early identification of ASD through telemedicine: Potential value for underserved populations. *Journal of Autism and Developmental Disorders*, 48(8), 2601–2610
- Khowaja, K., Salim, S. S., Asemi, A., Ghulamani, S., & Shah, A. (2020). A systematic review of modalities in computer-based interventions (CBIs) for language comprehension and decoding skills of children with autism spectrum disorder (ASD). *Universal Access in the Information Society*. <https://doi.org/10.1007/s10209-019-00646-1>
- Kildahl, A. N., Helverschou, S. B., Bakken, T. L., & Oddli, H. W. (2020). “If we do not look for it, we do not see it”: Clinicians’ experiences and understanding of identifying post-traumatic stress disorder in adults with autism and intellectual disability. *Journal of Applied Research in Intellectual Disabilities*. <https://doi.org/10.1111/jar.12734>
- Kim, S.W., Su, K.P., 2020. Using psychoneuroimmunity against COVID-19. *Brain Behav. Immun.* <https://doi.org/10.1016/j.bbi.2020.03.025>.
- Kinnear, D., Rydzewska, E., Dunn, K., Hughes- McCormack, L., Melville, C., Henderson, A., et al. (2020). The relative influence of intellectual disabilities and autism on sensory impairments and physical disability: A whole-country cohort of 5.3 million children and adults. *Journal of Applied Research in Intellectual Disabilities*. <https://doi.org/10.1111/jar.12728>
- Knutsen, J., Wolfe, A., Burke, B. L., Hepburn, S., Lindgren, S., & Coury, D. (2016). A systematic review of telemedicine in autism spectrum disorders. *Review Journal of Autism and Developmental Disorders*, 3(4), 330–344.
- Kohane, I. S., McMurry, A., Weber, G., MacFadden, D., Rappaport, L., Kunkel, L., Bickel, J., Wattanasin, N., Spence, S., Murphy, S., & Churchill, S. (2012). The co-morbidity burden of children and young adults with autism spectrum disorders. *PLoS ONE*, 7(4), e33224. <https://doi.org/10.1371/journal.pone.0033224>
- Kornack, J., Williams, A. L., Johnson, K. A., & Mendes, E. M. (2020). Reopening the doors to center-based ABA services: Clinical and safety protocols during COVID-19. *Behavior Analysis in Practice*. <https://doi.org/10.1007/s40617-020-00462-7>
- Kullar, R., Marcelin, J. R., Swartz, T. H., Piggott, D. A., Macias Gil, R., Mathew, T. A., & Tan, T. (2020). Racial disparity of coronavirus disease 2019 in African American Communities. *The Journal of Infectious Diseases*, 222(6), 890–893.
- Lam, K., Bodfish, J., & Pivan, J. (2008). Evidence for three subtypes of repetitive behavior in autism that differ in familiarity and association with other symptoms. *Journal of Child Psychology and Psychiatry*, 49, 1193–1200.
- Levante A, Petrocchi S, Colombi C, Keller R, Narzisi A, Masi G, et al. The effect of sleep-wake routines on the negative emotional states and aggressive behaviors in adults with autism spectrum disorders (ASD) during the COVID-19 outbreak. *Int J Environ Res Public Health*. 2022;19(9):4957.
- Li, L. (2020). Challenges and priorities in responding to COVID19 in inpatient psychiatry. *Psychiatric Services*. <https://doi.org/10.1176/appi.ps.202000166>

**The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

- Lindsay, S. (2017). Systematic review of factors affecting driving and motor vehicle transportation among people with autism spectrum disorder. *Disability and Rehabilitation*, 39(9), 837–846
- Liu, G., Pearl, A. M., Kong, L., Brown, S. L., Ba, D., Leslie, D. L., et al. (2019). Risk factors for emergency department utilization among adolescents with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 49(11), 4455–4467
- Liu, G., Pearl, A. M., Kong, L., Leslie, D. L., & Murray, M. J. (2017). A profile on emergency department utilization in adolescents and young adults with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 47(2), 347–358
- Liu, N., Zhang, F., Wei, C., Jia, Y., Shang, Z., Sun, L., et al. (2020). Prevalence and predictors of PTSS during COVID-19 outbreak in China hardest-hit areas: Gender differences matter. *Psychiatry Research*, 287, 112921. <https://doi.org/10.1016/j.psych res.2020.112921>
- Liu, N., Zhang, F., Wei, C., Jia, Y., Shang, Z., Sun, L., et al. (2020). Prevalence and predictors of PTSS during COVID-19 outbreak in China hardest-hit areas: Gender differences matter. *Psychiatry Research*, 287, 112921. <https://doi.org/10.1016/j.psych res.2020.112921>
- Love, A. M., Railey, K. S., Phelps, M., Campbell, J. M., Cooley-Cook, H. A., & Taylor, R. L. (2020). Preliminary evidence for a training improving first responder knowledge and confidence to work with individuals with Autism. *Journal of Intellectual Disabilities and Offending Behaviour*, 11(4), 211–219. <https://doi.org/10.1108/JIDOB-04-2020-0007>
- Macias Gil, R., Marcelin, J. R., Zuniga-Blanco, B., Marquez, C., Mathew, T., & Piggott, D. A. (2020). COVID-19 pandemic: Disparate health impact on the Hispanic/Latinx population in the United States. *The Journal of Infectious Diseases*, 222(10), 1592–1595.
- Malik-Soni N, Shaker A, Luck H, et al. Tackling healthcare access barriers for individuals with autism from diagnosis to adulthood. *Pediatr Res*. Published online March 25, 2021. doi:10.1038/s41390-021-01465-y
- Maral P, Punetha D. Older adult life in COVID-19 pandemic: Focus on social isolation, loneliness, and minimization of risks. *Ind Psychiatry J* 0;0:0.
- Mayes, S. D., Calhoun, S. L., Baweja, R., & Mahr, F. (2015). Suicide ideation and attempts in children with psychiatric disorders and typical development. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 36(1), 55.
- Ministry of Health and Family Welfare |GOI, 2020. Home [WWW Document]. URL <https://www.mohfw.gov.in/>
- Montemurro, N., 2020. The emotional impact of COVID-19: From medical staff to common people. *Brain Behav. Immun*. <https://doi.org/10.1016/j.bbi.2020.03.032>.
- Morens, D. M., Daszak, P., & Taubenberger, J. K. (2020). Escaping Pandora’s box—another novel coronavirus. *New England Journal of Medicine*, 382(14), 1293–1295.
- Mupaku, W. M., van Breda, A. D., & Kelly, B. (2021). Transitioning to adulthood from residential childcare during COVID-19: Experiences of young people with intellectual disabilities and/or autism spectrum disorder in South Africa. *British Journal of Learning Disabilities*, 49, 341–351. <https://doi.org/10.1111/bld.12409>
- Narzisi, A. (2020). Handle the autism spectrum condition during Coronavirus (COVID-19) stay at home period: Ten tips for helping parents and caregivers of young children. *Multidisciplinary Digital Publishing Institute*. <https://doi.org/10.3390/brainsci10040207>
- Narzisi, A. (2020). Phase 2 and later of COVID-19 lockdown: Is it possible to perform remote diagnosis and intervention for autism spectrum disorder? An online-mediated approach. *Journal of Clinical Medicine*, 9(6), 1850. <https://doi.org/10.3390/jcm9061850>
- Neece, C., McIntyre, L. L., & Fenning, R. (2020). Examining the impact of COVID-19 in ethnically diverse families with young children with intellectual and developmental

## **The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

- disabilities. *Journal of Intellectual Disability Research*, 64(10), 739–749. <https://doi.org/10.1111/jir.12769>
- NIMH Transforming the understanding and treatment of mental illnesses [WWW Document] *Ment. Illn. Defin.* 2017 [https://www.nimh.nih.gov/health/statistics/mental-illness.shtml#:~:text=Serious%20mental%20illness%20\(SMI\)%20is,or%20more%20major%20life%20activities](https://www.nimh.nih.gov/health/statistics/mental-illness.shtml#:~:text=Serious%20mental%20illness%20(SMI)%20is,or%20more%20major%20life%20activities) URL. [Google Scholar]
- Saghazadeh, A., Ataenia, B., Keynejad, K., Abdolalizadeh, A., Hirbod-Mobarakeh, A., & Rezaei, N. (2019). A meta-analysis of proinflammatory cytokines in autism spectrum disorders: Effects of age, gender, and latitude. *Journal of Psychiatric Research*, 115, 90–102
- Sanchez, M. J., & Constantino, J. N. (2020). Expediting clinician assessment in the diagnosis of autism spectrum disorder. *Developmental Medicine & Child Neurology*, 62(7), 806–812.
- Scheeren AM, Howlin P, Pellicano L, Magiati I, Begeer S. Continuity and change in loneliness and stress during the COVID-19 pandemic: a longitudinal study of autistic and non-autistic adults. *Autism Res.*
- Railey, K. S., Love, A. M., & Campbell, J. M. (2020). A systematic review of law enforcement training related to autism spectrum disorder. *Focus on Autism and Other Developmental Disabilities*. <https://doi.org/10.1177/1088357620922152>
- Raisi-Estabragh, Z., McCracken, C., Bethell, M. S., Cooper, J., Cooper, C., Caulfield, M. J., et al. (2020). Greater risk of severe COVID-19 in Black, Asian and Minority Ethnic populations is not explained by cardiometabolic, socioeconomic or behavioural factors, or by 25 (OH)-vitamin D status: Study of 1326 cases from the UK Biobank. *Journal of Public Health*, 42(3), 451–460
- Rajkumar R.P. COVID-19 and mental health: a review of the existing literature. *Asian J. Psychiatry*. 2020;52 doi: 10.1016/j.ajp.2020.102066.
- Ramirez, A. V., Ojeaga, M., Espinoza, V., Hensler, B., & Honrubia, V. (2020). Telemedicine in minority and socioeconomically disadvantaged communities amidst COVID-19 pandemic. *Otolaryngology-Head and Neck Surgery*. <https://doi.org/10.1177/0194599820947667>
- Rattaz, C., Dubois, A., Michelon, C., Viellard, M., Poinso, F., & Baghdadli, A. (2013). How do children with autism spectrum disorders express pain? A comparison with developmentally delayed and typically developing children. *PAIN®*, 154(10), 2007–2013.
- Roane, H. S., Fisher, W. W., & Carr, J. E. (2016). Applied behavior analysis as treatment for autism spectrum disorder. *The Journal of Pediatrics*, 175, 27–32. <https://doi.org/10.1016/j.jpeds.2016.04.023>
- Roux, A. M., Shattuck, P. T., Cooper, B. P., Anderson, K. A., Wagner, M., & Narendorf, S. C. (2013). Postsecondary employment experiences among young adults with an autism spectrum disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 52(9), 931–939. <https://doi.org/10.1016/j.jaac.2013.05.019>
- Sreyashi Sen. (2022). Covid-19; Thriving New Technologies for The Social Inclusion of People with Psychosocial Impairments. *International Journal of Indian Psychology*, 10(3). <https://doi.org/10.25215/1003.117>
- Stock, S., Bu, F., Fancourt, D. et al. Longitudinal associations between going outdoors and mental health and wellbeing during a COVID-19 lockdown in the UK. *Sci Rep* 12, 10580(2022). <https://doi.org/10.1038/s41598-022-15004-010.1016/j.jaac.2020.09.011>
- Sutantio, J. D., Puspongoro, H. D., & Sekartini, R. (2020). Validity of telemedicine for diagnosing autism spectrum disorder: Protocolguided video recording evaluation. *Telemedicine and e-Health*. <https://doi.org/10.1089/tmj.2020.0035>

**The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

- Tint, A., Maughan, A. L., & Weiss, J. A. (2017). Community participation of youth with intellectual disability and autism spectrum disorder. *Journal of Intellectual Disability Research*, 61(2), 168–180.
- Torous, J., & Wykes, T. (2020). Opportunities from the coronavirus disease 2019 pandemic for transforming psychiatric care with telehealth. *JAMA Psychiatry*. <https://doi.org/10.1001/jamapsychiatry.2020.1640>
- U.S. Food and Drug Administration. (2020a). Current and resolved drug shortages and discontinuations reported to FDA. Retrieved December 29, 2020 from [https://www.accessdata.fda.gov/scripts/drugshortages/dsp\\_ActiveIngredientDetails.cfm?AI=Sertraline%20Hydrochloride%20Tablets&st=c](https://www.accessdata.fda.gov/scripts/drugshortages/dsp_ActiveIngredientDetails.cfm?AI=Sertraline%20Hydrochloride%20Tablets&st=c)
- U.S. Food and Drug Administration. (2020b, August 4). Drug Shortages Response COVID-19. Retrieved December 29, 2020 from <https://www.fda.gov/drugs/coronavirus-covid-19-drugs/drugshortages-response-covid-19>
- UCLA. Center for autism research & treatment assessments in this time of social distancing. Retrieved December 29, 2020 from <https://www.semel.ucla.edu/autism/bosa-training>
- Van Steensel, F. J., Bögels, S. M., & Perrin, S. (2011). Anxiety disorders in children and adolescents with autistic spectrum disorders: A meta-analysis. *Clinical Child and Family Psychology Review*, 14(3), 302.
- Vasa RA, Singh V, Hologue C, Kalb LG, Jang Y, and psychiatric diagnoses, and autistic traits in transgender and gender-diverse individuals. *Nature Communications*, 11(1), 1–12. <https://doi.org/10.1038/s41467-020-17794-1>
- Yang Y, Shi L, Jin X, Tong S. Association of perinatal factors with suspected developmental delay in urban children aged 1-36 months—a large-scale cross-sectional study in China. *BMC Pediatr*. (2023) 23:11. doi: 10.1186/s12887-022-03819-9
- Yosep, I.; Prayogo, S.A.; Kohar, K.; Andrew, H.; Mardiyah, A.; Amirah, S.; Maulana, S. Managing Autism Spectrum Disorder in the Face of Pandemic Using Internet-Based Parent-Mediated Interventions: A Systematic Review of Randomized Controlled Trials. *Children* 2022, 9,1483. <https://doi.org/10.3390/children9101483>
- Zerbo, O., Qian, Y., Ray, T., Sidney, S., Rich, S., Massolo, M., et al. (2019). Health care service utilization and cost among adults with autism spectrum disorders in a US integrated health care system. *Autism in Adulthood*, 1(1), 27–36.
- Zhu, S., Wu, Y., Zhu, C.Y., Hong, W.C., Yu, Z.X., Chen, Z.K., Wang, Y.G., 2020. The immediate mental health impacts of the COVID-19 pandemic among people with or without quarantine management. *Brain Behav.Immun*. <https://doi.org/10.1016/j.bbi.2020.04.045>.10.1002/aur.2574
- Volkmar, F., Siegel, M., Woodbury-Smith, M., King, B., McCracken, J., State, M., et al. (2014). Practice parameter for the assessment and treatment of children and adolescents with autism spectrum disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 53(2), 237–257. <https://doi.org/10.1016/j.jaac.2013.10.013>
- Wagner, L., Corona, L. L., Weitlauf, A. S., Marsh, K. L., Berman, A. F., Broderick, N. A., et al. (2020). Use of the TELE-ASD-PEDS for autism evaluations in response to COVID-19: Preliminary outcomes and clinician acceptability. *Journal of Autism and Developmental Disorders*. <https://doi.org/10.1007/s10803-020-04767-y>
- Wallace, G. L., Kenworthy, L., Pugliese, C. E., Popal, H. S., White, E. I., Brodsky, E., et al. (2016). Real-world executive functions in adults with autism spectrum disorder: Profiles of impairment and associations with adaptive functioning and co-morbid anxiety and depression. *Journal of Autism and Developmental Disorders*, 46(3), 1071–1083.
- Warrier, V., Greenberg, D. M., Weir, E., Buckingham, C., Smith, P., Lai, M. C., et al. (2020). Elevated rates of autism, other neurodevelopmental



**The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD)**

***Acknowledgment***

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

***Conflict of Interest***

The author(s) declared no conflict of interest.

***How to cite this article:*** Sen, S. (2023). The Impact of the COVID-19 Pandemic on Community Participation and Social Inclusion of People with Significant Mental Health Issues Such as Serious Mental Illness (SMI) and Autism Spectrum Disorder (ASD). *International Journal of Indian Psychology*, 11(4), 1639-1671. DIP:18.01.149.20231104, DOI:10.25215/1104.149