

Commentary

The Impact of COVID-19 on People with Mild Cognitive Impairment/Dementia and Their Caregivers. The Role of a Remote Neuropsychological Evaluation: Commentary

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Abstract

The COVID-19 pandemic has significantly impacted individuals with Mild Cognitive Impairment (MCI) and dementia, as well as their caregivers. This commentary explores the multifaceted effects of the pandemic on this vulnerable population, including accelerated cognitive decline, increased behavioral symptoms and heightened caregiver strain. It also discusses the role of remote neuropsychological evaluations as a valuable tool for monitoring cognitive function during the pandemic, as highlighted by recent research. The commentary emphasizes the need for resilient and adaptable care models that integrate technology, enhance caregiver support, address health disparities, and ensure continuous social engagement.

Keywords: Alzheimer's; COVID-19; Dementia; MCI; Remote evaluation

Introduction

The COVID-19 pandemic has significantly altered the lives of individuals globally, with particularly severe implications for vulnerable populations such as those with Mild Cognitive Impairment (MCI) and dementia, especially Alzheimer's disease [1,2]. In a previous publication, we highlighted the various challenges faced by this

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demographic and their caregivers during the pandemic, including increased isolation, disrupted routines, and exacerbated cognitive and emotional symptoms [3]. This commentary aims to extend the discussion by exploring recent updates, additional research findings, and deeper analyses of the issues addressed in the original article, with a particular focus on the role of remote neuropsychological evaluation.

Recent Updates in Research

Since the publication of the focal article, several studies have emerged, shedding further light on the pandemic's impact on individuals with MCI and dementia. These studies indicate a multifaceted impact, encompassing not only cognitive and psychological aspects but also social and physical health dimensions. Key findings include:

- **Accelerated Cognitive Decline:** Research has demonstrated that the cognitive decline in dementia patients has been more rapid during the pandemic [4]. This acceleration is attributed to decreased mental stimulation, reduced social interactions, and heightened stress levels due to the pandemic's uncertainty and restrictions. Studies have reported significant drops in cognitive scores over shorter periods compared to pre-pandemic assessments, underscoring the need for continuous cognitive engagement even during global crises [2,4,5]
- **Increased Behavioral Symptoms:** There has been an observable uptick in behavioral and psychological symptoms among dementia patients, including agitation, anxiety and depressive symptoms [6]. The stress and uncertainty of the pandemic, combined with changes in daily routines and reduced access to regular social and therapeutic activities, have exacerbated these symptoms. Caregivers report more frequent episodes of confusion and distress in their loved ones, making daily management more challenging [7]
- **Strain on Caregivers:** Caregivers have faced heightened stress, burnout, and mental health issues due to increased caregiving demands and limited respite options. The pandemic has amplified the emotional and physical toll on caregivers, who often juggle multiple responsibilities with minimal support. Surveys indicate higher levels of anxiety and depression among caregivers, highlighting the urgent need for targeted mental health interventions and support systems [7,8]

Analyzing Key Issues

Social isolation and loneliness

The enforced social distancing and lockdown measures have led to unprecedented levels of isolation for individuals with MCI and dementia [5]. This isolation has been detrimental, as social interaction is crucial for maintaining cognitive functions and emotional well-being in these populations. Isolation has not only affected patients but also caregivers, who often feel isolated in their roles [9,10]. Recent studies have explored virtual interventions, such as online cognitive stimulation and social activities, to mitigate these effects [11]. While these interventions show promise, access to technology and digital literacy

remain significant barriers. Ensuring equitable access to technology and training for both patients and caregivers is essential to maximize the benefits of virtual social interaction.

Disruption of routine care

Routine care for dementia patients, including day programs, in-person therapy, and medical appointments, has been severely disrupted. The sudden shift to telehealth services has provided a critical lifeline, yet its efficacy varies. Some patients and caregivers find telehealth inadequate for addressing complex care needs, such as physical therapy and detailed cognitive assessments [12]. Here, we highlight the potential for hybrid models combining in-person and virtual care to enhance service delivery in post-pandemic times. Developing robust protocols for hybrid care, ensuring that patients receive comprehensive assessments, and personalized care plans are crucial for the future.

Remote neuropsychological evaluation

The pandemic has necessitated the rapid adoption of remote neuropsychological evaluations, as previously highlighted by our group [13]. Remote assessments have now proven to be a valuable tool in monitoring cognitive function and progression in older adults with MCI and dementia. This tool has now been adopted in many clinics and is expanded in the evaluation of the cognitive status of people with different diseases (i.e., Parkinson's, aphasia etc.). These evaluations can be conducted via teleconferencing platforms, providing a safe and accessible means of continuous care. However, challenges such as technical difficulties, the need for a reliable internet connection, and the requirement for caregiver assistance during assessments must be addressed to optimize their effectiveness. The development of standardized protocols and training for both clinicians and caregivers is necessary to ensure the reliability and validity of remote assessments. Future developments should focus on improving the user-friendliness of these tools and ensuring equitable access across different socioeconomic groups. Additionally, integrating remote evaluations with in-person follow-ups could enhance overall care quality.

Psychological and emotional impact on caregivers

Caregivers have borne a heavy burden during the pandemic, with many experiencing increased anxiety, depression and physical health issues. The lack of support networks and respite care has exacerbated these problems [3]. New research suggests the need for targeted mental health support for caregivers [14], including counseling, support groups, and stress management programs. Implementing these supports is crucial for maintaining the well-being of caregivers, who are integral to the care system for individuals with MCI and dementia. Community-based initiatives and virtual support groups can provide much-needed respite and emotional support.

Health disparities

The pandemic has highlighted existing health disparities, with individuals from lower socioeconomic backgrounds and minority communities experiencing greater challenges [15]. Limited access to healthcare, financial constraints, and higher rates of infection have compounded the difficulties faced by these groups. Addressing these disparities requires a multifaceted approach, including policy changes, and increased funding for community-based services. It is also essential to ensure that remote healthcare services are accessible to all. Programs to provide affordable internet access, digital devices,

and training can help bridge the gap. Moreover, culturally tailored interventions and support systems can better meet the needs of diverse communities, ensuring equitable care.

Conclusion

The COVID-19 pandemic has profoundly impacted individuals with MCI and dementia and their caregivers, revealing critical vulnerabilities in our healthcare and social support systems [3,4,16]. Moving forward, it is essential to build on the lessons learned during this period to develop resilient, adaptable care models that can withstand future crises. Remote neuropsychological evaluation, offers a promising avenue for maintaining cognitive health and should be further developed and integrated into standard care practices [13]. By leveraging technology and addressing systemic issues, we can create a more supportive and effective care environment for individuals with MCI and dementia and their caregivers.

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