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Article

Mental Health and Perceived Awareness of the South Asian Indian Community During the COVID-19 Pandemic

A Systematic Review of Findings

Sagar S. Lad[1,2,3,4], Saajan Bhakta[5], and Veena Hira[6]

[1]Mid Atlantic Mental Illness Research, Education, and Clinical Center (MIRECC), Durham, NC, USA
[2]Department of Mental Health, W.G (Bill) Hefner VA Healthcare Center, Salisbury, NC, USA
[3]Department of Neurology, Wake Forest School of Medicine, Winston-Salem, NC, USA
[4]Center for Aging and Neurocognitive Service (CANS), Salem VA Medical Center, Salem, VA, USA
[5]Department of Research & Scholarly Activity, Kansas College of Osteopathic Medicine, Wichita, KS, USA
[6]Faculty of Science, Carleton University, Ottawa, ON, Canada

Abstract: The scope of the United Nations Development Programme (2019) emphasizes combating adaptive challenges, building resilience, and sustainability. This systematic review offers a range of perspectives through an in-depth overview of existing literature on the coronavirus disease 2019 (COVID-19) pandemic and the psychological impact it is having on the South Asian community in India. The selected studies focused on COVID-19 were mixed; however, the consensus among articles had themes relating to fear, stress, and anxiety. The results yielded 17 unique articles. Overall, the review supports the understanding of challenges related to mental healthcare and the attitudes and awareness of South Asians toward the COVID-19 pandemic. This review aims to assist healthcare providers to be better informed on the impact of COVID-19 on South Asians.

Keywords: COVID-19 pandemic, awareness, attitudes, mental healthcare, Indian, South Asian

Impact and Implications. This systematic review supports the understanding of how the COVID-19 pandemic impacts Indians on good health and well-being (UNDP Goal 3) and supporting the marginalized and disadvantaged (UNDP Goal 10). This review also highlights how reducing inequalities in India is an important part of addressing the COVID-19 pandemic in India (UNDP Goal 10). The researchers aimed to evaluate the available scholarly literature on South Asian Indian mental health amid pandemics. It was discovered there is a significant shortage of relevant research providing insight into distress and fear levels among South Asian Indians. Given the dearth of literature on the topic, there is a need for more robust and updated information on the topic to help identify and understand research gaps, inform clinical care, and provide direction for future research.

Understanding mental health dynamics of specific cultural groups is an important part of developing sustainable interventions supporting good health and well-being among marginalized communities. As the coronavirus disease 2019 (COVID-19) pandemic continues to rapidly evolve, it is important for clinicians to understand the unique impact it has on the South Asian Indian population, especially within the context of the United Nations Development Programme (UNDP's) focus on combating adaptive challenges, building resilience, and especially sustainability. The COVID-19 pandemic is an adaptive challenge with direct links to structural and systemic issues (e.g., poverty, hunger, gender inequalities). Addressing these challenges with technical solutions is ineffective, so rather, the UNDP focuses on solutions that can be flexibly sustained over time.

As of June 2021, there were over 30 million confirmed cases of COVID-19 in India and approximately 400,000 deaths (Banerjee & Bhattacharya, 2020; Gupta & Misra, 2020; Kumar et al., 2020; Kuttiatt et al., 2020; Pettersson

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et al., 2021). It has caused a ripple effect across India, and as such, trauma practitioners will be tasked with understanding the holistic picture of mental health for many years to come. Thus, it is important to understand and analyze the current relevant literature to inform the clinical care this population will need.

According to the Center for Strategic and International Studies, South Asia poses public health challenges on both demographic and geographic scales. According to Center for Strategic and International Studies (2010), "India, Pakistan, Bangladesh, Nepal, and Sri Lanka are home to nearly one-fifth of the world population. . .home to two-thirds of the world population living on less than $1 a day." These regions face poor sanitation, maternal health, and access to healthcare for widespread communicable diseases. Higher proportions of vascular risk factors (e.g., diabetes, cardiovascular disease, stroke, obesity) increase risk of hospitalization, intensive care, and death with COVID-19 (Prasad et al., 2012). Furthermore, uneven resources resulting in health inequalities have been attributed to disparities in education, urban/rural residence, and stigmatization (e.g., isolation). These have a profound influence on delivering appropriate health services and ensuring positive outcomes (Islam et al., 2020; Sengupta et al., 2017).

The Indian community, in some aspects, is arguably a homogenous one, with strong bonds between elders, multigenerational families, vibrant traditions, and an interwoven matrix of multiculturalism. Multigenerational homes faced with instabilities (e.g., financial, domestic violence, religious tensions) can be disincentivized to participation in testing and appropriate contact tracing. With a strong presence in professions of healthcare, commercial business, and the service and manufacturing industries, prolonged community spread has been of additional concern. In essence, cultural understanding during pandemics is of utmost importance for practitioners of science to be effective (Das et al., 2020).

The UNDP has 17 Sustainable Development Goals ranging from eliminating poverty, to balancing gender equality, to advocating for climate action (UNDP, 2019). The goals of the UNDP are focused on social action and change (e.g., eliminating hunger global challenges that society faces, including prosperity, peace, and justice with a target date of 2030). This literature review is focused on understanding the mental health and well-being of South Asian Indians within the COVID-19 pandemic. Given the immense diversity in India, it is important to acknowledge that *good health* can be perceived differently by different groups in the county. For the purpose of this review, the researchers focused on the mental health of this population within the COVID-19 pandemic context.

The present study examined the existing literature to understand how COVID-19 is impacting the mental health and well-being of South Asian Indians with a special focus on addressing the UNDP's 17 Sustainable Development Goals proposed by the general assembly. Many have argued that ethnic minority groups have been at a disadvantage due to long-standing systemic health and social inequities when it comes to mitigating the risks of noncommunicable diseases and pandemics (US Department of Health and Human Services, 2020). This systematic review further supports the understanding of how the COVID-19 pandemic is impacting Indians on good health and well-being (UNDP Goal 3) and supporting the marginalized and disadvantaged (UNDP Goal 10). The researchers aimed to evaluate the available scholarly literature on what are the most significant effects on mental healthcare and the attitudes and awareness of South Asians toward the COVID-19 pandemic. Due to the dearth of literature on the topic, the authors identify a need for more robust and updated information to identify and understand research gaps, inform clinical care, and provide direction for future research.

Method

Systematic Review

Search Strategy and Screening

This study was not registered. Study type and scope of interest were determined a priori and defined in the format of population, intervention, comparator, outcome, and study design criteria presented in Table 1. Abstracts were

Table 1. PICOS

Parameter	Inclusion	Exclusion
Population	South Asian Indians	Not defined as South Asian Indians
Exposure	COVID-19	No comparisons
Outcomes	Mental health, perceived awareness, attitudes	No defined outcomes
Time	January 2020 to present	Prior to January 2020
Study design	Case–control and cross-sectional	Case reports, editorials, opinions, dissertations/theses, reviews

Note. COVID-19 = coronavirus disease 2019; PICOS = population, intervention, comparator, outcome, and study design.

screened, and studies focused on South Asian Indian participants and COVID-19 were included. Articles must have been written in English and published in a peer-reviewed journal. Systematic searches were conducted on May 26, 2021, with sensitive search term filters to identify our underlying focus (please see Table 2 with the detailed search strategy and results from EBSCO, PubMed, and OVID Clinical Edge). Date restrictions (January 2020 to present) were used in the searches given the recent emergence of the COVID-19 pandemic. Unpublished studies and dissertations were not included; for discussion, see van Driel et al. (2009) and Vickers and Smith (2000). The search results were archived using Zotero. Two authors, VH and SB, independently screened abstracts. Each author recorded the results in independent Excel files. Discrepancies (n = 32) were reviewed by a third author (SL), with inclusion based on the retain rating by two of the three authors.

Selection

A full-article review was conducted independently by two authors, VH and SB. The review criteria for inclusion were that the study must have employed an experimental or cross-sectional design, the study must have consisted of original research, must have been published in a peer-reviewed outlet, must have reported data on associations among COVID-19 and the outcome of interest (i.e., mental healthcare, attitudes, awareness, South Asian Indian population), and the study must have utilized a cross-sectional or experimental design. All initial reviews were rated equally, and a third rater was not needed to address discrepancies. Reference lists of the included articles were reviewed by the author SL. Table 3 lists the included records and brief information on each. Figure 1 presents a preferred reporting items for systematic reviews and meta-analyses flow diagram. Once the studies were identified from the literature search, the review occurred in a three-step process. First, titles and keywords were reviewed to confirm the publication was focused on COVID-19 and mental healthcare within the South Asian community. Second, a review of abstracts was completed to confirm COVID-19 was an independent variable of interest and that the study met the study design criteria. Third, a full-text review was completed to identify articles meeting all selection criteria. This study includes the qualitative synthesis of those articles meeting all selection criteria, which was a total of 17 unique credible articles.

Results

The purpose of this review was to highlight the existing data on how COVID-19 affects the mental health of South Asian Indians. As depicted in Figure 1, the literature search yielded 17 unique articles after accounting for duplicates. Due to the specificity of our search terms, restrictions in date range,

Table 2. Search strategy and results for EBSCO, PubMed, and OVID clinical edge

		Databases		
		EBSCO[a]	PubMed	OVID Clinical Edge
Steps	Terms	Hits		
1	"South Asian" OR "South Asia" OR "Indian" OR "Indo Asian" OR " Indo-Asian" OR "India"	238,170	308,534	144,000
2	"Virus"	1,007,123	857,882	382,000
3	"COVID-19" OR "COVID 19" OR "SARS CoV-2" OR "SARS CoV 2" OR "coronavirus" OR "severe acute respiratory syndrome coronavirus 2" OR "coronavirus SARS-CoV-2" OR "coronavirus SARS CoV 2" OR "2019 novel coronavirus" OR "2019 nCoV" OR "COVID-19 pandemic" OR "COVID"	229,027	150,267	313,000
4	2 AND 3	36,637	31,243	91,000
5	1 AND 4	513	645	6,000
6	"Mental health disorders" OR "Psychiatry" OR "Anxiety" OR "Depression" OR "Attitude" OR "Awareness" OR "mental healthcare" OR "sleep disturbance" OR "Suicide" OR "Suicidal thoughts" OR "Psychosocial factors" OR "mental health"	4,687,183	1,699,347	2,835,000
7	5 AND 6	39	43	3,000
8	Limit: Date 2019–2021	N/A	N/A	2,000
8	Limit: English	39	43	295
9	Duplicates removed	38	42	295

Note. Search completed on May 26, 2021. [a]EBSCO: CINAHL Plus with Full Text; eBook Collection (EBSCOhost); Health Policy Reference Center; Library, Information Science & Technology Abstracts; MEDLINE Complete; APA PsycArticles; APA PsycBooks; Psychology and Behavioral Sciences Collection; and APA PsychInfo.

Table 3. Summary of findings from research studies

Nos.	References	Population considered	Study design	Tools	Main findings/outcome	Limitation/gaps in literature
1	Amalakanti et al. (2020)	• General population (*n* = 1837)	• CSS	• Self-reported questionnaire	• Above-average knowledge scores related to lockdown and PPE • Positive attitude toward lockdown • Low knowledge scores (women, low education, physical workers)	• Bias: selection, sampling, recall • Inclusion criteria (access to smartphones) English language only
2	Chandu et al. (2020)	• General population (*n* = 307) sample from Andhra Pradesh	• CSS	• CAS	• Fear of social interaction • Illness anxiety • Lower educational qualifications (higher CAS score rating)	• Two items loading for *illness anxiety* factor
3	Chehal et al. (2020)	• General population (*n* = 47, 632) tweets	• CSS	• Latent Dirichlet Allocation of tweet	• Lockdown-induced negative emotions, sadness, disgust, and anticipation	• Tweets (English language only)
4	Das et al. (2020)	• General population (*n* = 422)	• CSS	• Self-reported questionnaire	• Prevalence of depression and stress • Risk factor for perceived stressed (working 6 h per day)	• BIAS: selection
5	Dkhar et al. (2020)	• General population (*n* = 1,574)	• CSS	• Self-reported questionnaire	• Respondents had good knowledge, positive attitude, and sensible practices regarding the pandemic	• Inclusion criteria (access to smartphones)
6	Juneja et al. (2020)	• General population (*n* = 450)	• CSS	• Self-reported questionnaire	• Negative impact on psychosocial health due to lockdown • Depression and sadness due to incessant news updates	• Inclusion criteria (access to smartphones) • English language only
7	Khanna et al. (2020)	• Healthcare population (*n* = 2,355)	• CSS	• Self-reported questionnaire • PHQ-9	• Depression; majority mild • Depression significantly higher for younger age	• Bias: self-reporting • Assessment tool limitations
8	Kumar et al. (2020)	• Healthcare population (*n* = 331)	• CSS	• Self-reported questionnaire • IES-R	• Students prone to PTSD • Family involvement inversely associated with stress • Financial instability and uncertainty of exams positively associated with stress	• Inclusion criteria (access to smartphones)
9	Marbaniang et al. (2020)	• General population (*n* = 167)	• QS	• GAD-7	• PLHIV showed higher generalized anxiety	• Bias: selection, sampling, and social desirability • Generalizability • Inclusion criteria (access to internet) • English language only • Confounding variables
10	Mathias et al. (2020)	• General rural population (*n* = 24)	• QS	• Personal or phone interviews using purposive selection	• Participants experienced extreme mental despair, hunger, and loss of income • Mental distress (feeling overwhelmed, distressed, socially isolated increased events of social discrimination)	• Small sample size • Reduced communication • Bias: social desirability

(Continued on next page)

Table 3. (Continued)

Nos.	References	Population considered	Study design	Tools	Main findings/outcome	Limitation/gaps in literature
11	Nilima et al. (2020)	• Rural population (n = 1,316) in Karnataka, Delhi, UP, Kerala, Assam, and Bihar	• CSS	• Self-reported questionnaire	• Worrying for health of family members • Stress over losses and job • Distress over inequities in healthcare	• Inclusion criteria (access to internet)
12	Roy et al. (2020)	• General urban population (n = 662)	• CSS	• Self-reported questionnaire	• Moderate level of knowledge about COVID-19 • High anxiety levels preoccupied with thoughts • Increased perceived mental health–related issues, (anxiety, sleep difficulties, paranoia about acquiring COVID-19)	• Inclusion criteria (access to internet) • English language only
13	Saurabh and Ranjan (2020)	• General youth population (n = 131)	• CSS	• Self-reported questionnaire	• Greater psychological distress of children in quarantine versus nonquarantined • Worry, helplessness, and fear	• Bias: sampling, recall, social desirability
14	Varshney et al. (2020)	• General population (n = 1,106)	• CSS	• Self-reported survey (FEEL-COVID) • IES-R	• Significant psychological impact in initial stages of COVID-19 • Higher impact predicted for younger age, female gender, and comorbid physical illness	• Bias: selection, sampling, social desirability • Generalizability • Inclusion criteria (access to internet) • English language only • Confounding variables
15	Verma and Mishra (2020)	• General population (n = 354)	• CSS	• Online-based interview; DASS-21	• Moderate to extremely severely depressed, anxious, and stressed • Binge drinking significantly associated with depression, anxiety, and stress • Employment status significantly associated with depression and anxiety • Gender significantly associated with anxiety	• Generalizability
16	Wilson et al. (2020)	• Healthcare professionals (n = 433)	• CSS	• Self-reported questionnaire; GAD-7; PHQ-9; PSS-10	• High-level stress (depressive and anxiety symptoms) among healthcare professionals • Women had two times odds of developing moderate- or high-level stress, depressive, and anxiety symptoms, especially those in temporary accommodations	• Bias: sampling • Generalizability
17	Hazarika et al. (2021)	• General population (n = 541)	• CSS	• DASS-21	• Pre-existing medical illness (diabetes mellitus, hypertension, thyroid dysfunction, and mental illness) • Stress, anxiety, and depression • Respondents unaware of exposure status more likely to have depression	• Bias: sampling, social desirability

Note. CAS = COVID-19 Anxiety Scale; CSS = cross-sectional study; DASS-21 = Depression Anxiety Stress Scale-21 items; GAD-7 = Generalized Anxiety Disorder; IES-R = Impact of Event Scale-Revised; IGDSF = Internet Gaming Disorder Short Form-9; PHQ-9 = Patient Health Questionnaire-9 items; PLHIV = people living with HIV; PPE = Personal Protective Equipment; PSS = Perceived Stress Scale-10 items; QS = qualitative study.

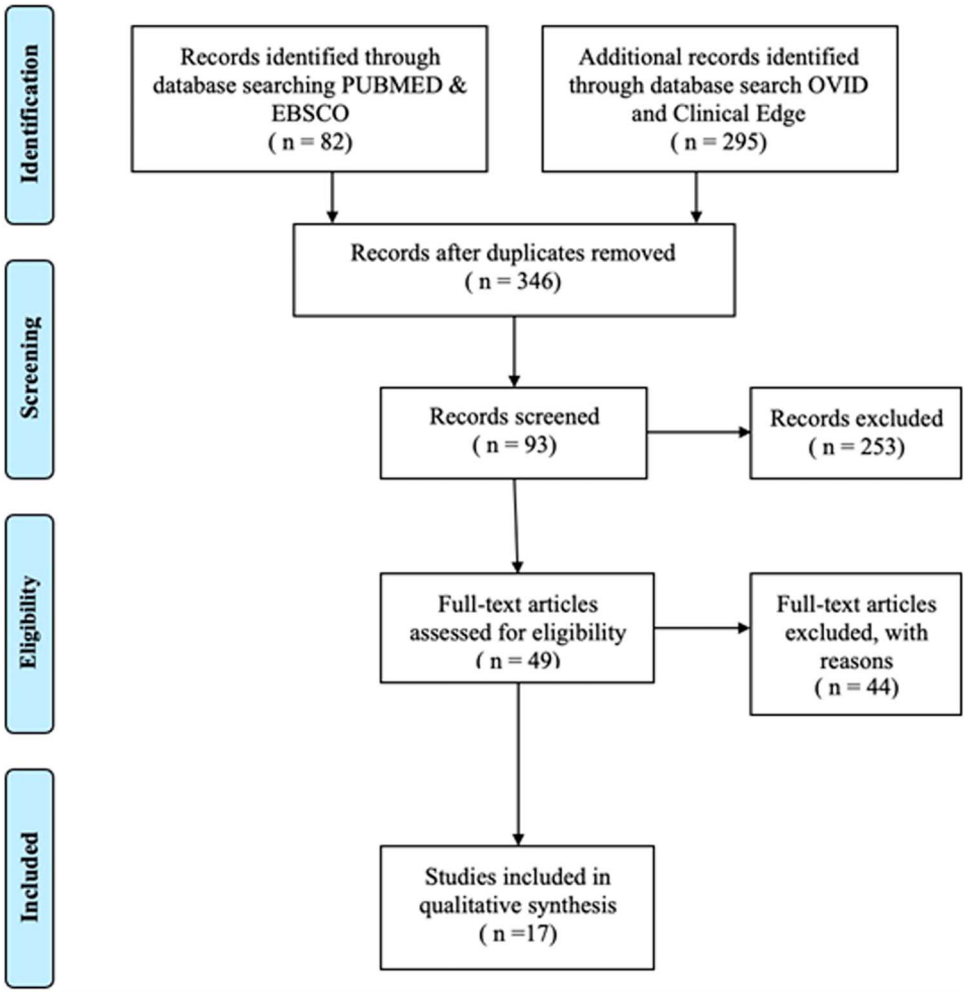

Figure 1. Summarized search strategy.

deduplication, and screening process of eligibility, this led to the high attrition rate of quality articles that were reviewed. The articles reviewed focused on themes related to fear (depicted by the fear of COVID-19 scale), increased levels of emotional disturbance, negative burden (e.g., worry, helplessness, sleep disturbances), and specific psychological impacts on younger ages, females, and comorbid physical illnesses (Roy et al., 2020; Varshney et al., 2020). Self-reported questionnaires were also reviewed which consisted of basic questionnaires that identified sociodemographic variables. The seven-item fear of COVID-19 scale, a self-report survey developed by Ahorsu et al. (2020), was used to assess fear regarding COVID-19 on a five-point Likert scale. The items of the FCV-19S were constructed based on extensive review of existing scales on fears, expert evaluations, and participant interviews. Stress was often related to factors such as employment and uncertainty of the virus (Doshi et al., 2020; Roy et al., 2020). Causative factors related to fears of COVID-19 infection revealed a culmination of lockdown-imposed loneliness, work-related stress, and unavailability of alcohol resulting in an increased number of suicide cases (Dsouza et al., 2020; Pathare et al., 2020) and bilateral damage to mental and physical healthcare (Roy et al., 2020; Varshney et al., 2020). Children and women in particular were likely to observe greater psychological stress (Saurabh & Ranjan, 2020; Varshney et al., 2020). Education was also found to have played a role in understanding of the virus (Doshi et al., 2020), though not the exclusive factor, as fear of the virus may be linked to systematic, structural, and socioeconomic challenges and inequities in India. These tie most closely to UNDP Goal 10, which focuses on reducing inequalities. The major themes highlighted throughout this systematic review were increased anxiety, depression, and stress during the pandemic (Das et al., 2020; Mathias et al.,

2020). Limitations of various studies included access to technology (internet, smartphone), education, and English language.

This resulted in selection and sampling biases that limited generalizability of findings regarding awareness of the virus and perceived mental health.

Conclusion

The UNDP (2019) gives special focus to building resilience and fostering sustainability. This study examined the existing literature to understand how COVID-19 impacts mental health and well-being of South Asian Indians, with special focus on addressing the UNDP's 17 Sustainable Development Goals proposed by the general assembly. The mental health dynamics of specific cultural groups are important parts of developing effective sustainable interventions (e.g., supporting health, well-being). This systematic review has helped advance an understanding of COVID-19 effects on health and well-being (UNDP Goal 3) with hope to support the marginalized and disadvantaged (UNDP Goal 10). A significant shortage of relevant research with insight into distress and fear levels was elucidated. To further aid the mission of the UNDP in India, there remains a significant need for more robust research on the topic.

Over the last year, there have been over 180 million global cases of novel coronavirus infections (Pettersson et al., 2021); however, the literature evaluating the impacts of COVID-19 on the South Asian Indian population and the challenges they face in receiving care and diagnoses has thus far been limited. This was one of the first systematic reviews of South Asian Indians and COVID-19's effects on mental health. Specific measures that address infrastructure, language, and communication barriers were analyzed. For example, the burdens of chronic disease and persistent underfunding of Indian health systems have disproportionately impacted this population (Islam et al., 2020; Sengupta et al., 2017).

South Asians, and similarly disadvantaged communities, face reinforcing factors relating to a higher likelihood of contracting the virus (e.g., workplace exposures, inability to telework, living in densely populated areas, reliance on public transportation; Germain & Yong, 2020; Khanna et al., 2020; Kumar et al., 2020; Otu et al., 2020). Integration of these findings into clinical settings could improve education on common adverse psychological consequences, encourage health-promoting behaviors, and promote self-care of healthcare providers. For healthcare research support to be better tailored to ethnic minorities, better representation in epidemiological data is crucial.

Having said the above, addressing the barrier of mental health continues to be an emerging area of concern as it is often an underutilized service, primarily due to the stigma associated with discussing mental health (Banerjee & Bhattacharya, 2020). South Asians also face specific cultural health challenges that render them vulnerable to pandemics (e.g., COVID-19). For example, South Asian Indians frequently suffer from vascular-related health diseases, which according to the Centers for Disease Control and Prevention (CDC) are risk factors related to infection tolerance (CDC, 2020). Furthermore, South Asians often maintain specific traditional–cultural religious values, dietary, and healthcare practices which often may not align well with allopathic medicine (Golechha, 2020; Rajkumar, 2020). The combination of traditional values' influence on healthcare decisions, reduced English proficiency, and unfamiliarity with different services in various countries are all barriers the South Asian community faces when challenged with containing pandemics (Germain & Yong, 2020; Otu et al., 2020).

This systematic review is one of the first to review a range of perspectives summarized in an in-depth overview of the present COVID-19 pandemic and the South Asian Indian community.

Notwithstanding, there are several limitations; first, the scarcity of literature to make accurate conclusions on mental healthcare across this community. Many of the recent studies had limited validated measures used, incomprehensive data, and a lack of investigations of COVID-19 among this community. When empirical data existed, it was often limited by descriptions specific to niche populations within the South Asian community, and resultantly, inferences could not be readily made for other South Asians.

Since this was a scoping review aimed at mapping the current literature, we did not complete a quality assessment of the data. The search date restrictions imposed may have excluded studies with valuable historical perspectives. Nonetheless, the authors believe this review captures a relevant snapshot of the most up-to-date research on this topic.

This review is one of the first to shed light on the present COVID-19 pandemic for the South Asian Indian community, though future development is needed, with more longitudinal data collected. The information gleaned by this review is humbly presented with an aim to assist clinical researchers and healthcare providers to be better informed of COVID-19's impact on this community, with a special focus on the mental health, in preparation for future inevitable pandemics.

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ORCID
Sagar S. Lad
https://orcid.org/0000-0002-1278-8355

Sagar S. Lad
W.G (Bill) Hefner VA Healthcare Center, 11-M2/MH&BS
1601 Brenner Ave
Salisbury, NC 28144
USA
sagar.lad2@va.gov