

# Post covid Behavioral changes among the Indian population (Depression, Health and Hygiene, Socializing, Afraid of going out)

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## ABSTRACT

*This integrative review aims to examine new research on the connection between severe acute respiratory syndrome-CoV-2 (COVID-19 novel coronavirus) and post covid behavioural changes among the Indian population will lead to a greater understanding of mental health like depression and health and hygiene, socializing, afraid of going out. People's mental health is suffering due to the coronavirus epidemic, especially when most affected people are being instructed to follow self-isolation, social isolation, and government-imposed nationwide lockdowns. During the pandemic, all international flights and traveling were cancelled by the Indian government. During the pandemic, connecting people and promoting their mental health and well-being are important goals of digital health technologies. Mental health and social services were already stressed before the COVID-19 pandemic because of increasing daily mental health and suicide cases. The study aimed to examine the incidence of anxiety and self-medication during the COVID-19 epidemic. We briefly discuss the relationship between healthy behaviours and mental health and potential changes in both domains brought about by pandemic prevention strategies. We also advocate for more studies on the immediate and long-term effects of changing one's health behaviour. Training and human resource development strategies must emphasize emotional well-being to equip and empower organizational members to handle this stress.*

**KEYWORD:** Covid-19, Mental health, Demographic factor, Self-medication Psychiatric illnesses, Technology

## INTRODUCTION:

A novel coronavirus (covid 19) originated in the city of China, Wuhan; the World Health Organization (WHO) has been declared COVID-19 a global pandemic on March 12, 2020, and ordered that preventative steps be made to slow the viral transmission (Lokhandwala & Gautam, 2020). In addition to preventing coronavirus, some public health initiatives urged residents to practice social distancing, defined as keeping a distance from others and avoiding social gatherings (P. Singh, 2021). There are limiting contact with the elderly and those who are ill and viral infection, avoiding standard greetings like handshakes, and avoiding crowded places and unimportant crowds (Grover et al., 2020). For that time, Indians would need to be creative in their physical activity habits, like they had to drink immunity booster drinks, given the closing of leisure centres, public parks, and playgrounds (Aaditya & Rahul, 2021). After covid, peoples are afraid to go out and they are avoiding the social gathering and ,also they focus their health and physical activity like yoga, meditation, exercise through a different platform like personal, social, and physical (Azzouzi et al., 2022). Individual psychological factors include things like perceived competence and confidence, the social environment includes emotional and practical support from home (Bherwani et al., 2020). The physical environment provides access to free or inexpensive recreational activities and opportunities for outdoor physical activity (Samuels et al., 2021). Public are aware adverse and encourage physical activity in the home setting to counteract the COVID-19 protective lifestyle regulations' potential adverse effects and ensure that limits do not cause physical activity to be eliminated (Mahanty et al., 2021). This study aimed to comprehend how the global pandemic and public health regulations affected Indians (Bera et al., 2022). We specifically seek to report changes in activity related to health barriers and facilitators, engagement, and well-being (depression, health and hygiene, immunity boost

product) among both aware and unaware people since the start of corona virus (**Kochhar et al., 2020**). During covid time increase case of covid patent day by day. Doctors and nurses have improper training on personal protective equipment, procedures for infection control, a lack of formal psychological support lead to very difficult (**D. Singh et al., 2020**). during covid, spread of this virus includes the assumption of a food and necessity shortage, restrictions on movement and social interaction, being separated from family and friends, losing jobs and the closing of businesses, and the failure to raise living standards for those receiving daily wages (**Makhbul & Rawshdeh, 2021**).

## LITERATURE REVIEW:

The Corona virus outbreak has caused people to face new challenges. There are emotional, behavioural, and psychological costs to the public in addition to the spread of viruses and disease mortality among at-risk people (**Pedrosa et al., 2020**). Due to COVID-19, 76.7 percent of the deaths in India have occurred in those aged 50 and over (**Mohebi et al., 2018**).

To safeguard Indian citizens, the government formally unveiled a COVID-19 surveillance software called "Aarogya Setu" on April 2, 2020 (**Aaditya & Rahul, 2021**). The app aims to get people involved in the best appropriate practices and ad advisories coactively with the ongoing virus outbreak (**Kosanke, 2019**).

India are experiencing a variety of psychological & emotional reactions as a result of the government's state-wise lockdown (**Bandhu et al., 2020**). The study sought to determine the connection between post-traumatic anxiety disorder and depression in both males and females (**Papri, 2020**). Reduced coronavirus transmission during the corona pandemic depends on contamination-prevention practices, including mask use and physical separation (**Samuels et al., 2021**).

Several recent studies used population surveys to examine COVID-19-related behaviours and psychological symptoms. In an Australian study, more protective behaviour use was linked to higher stress and anxiety levels (**Newby et al., 2020**). Presumptive OCD was reported to have a significant frequency during the pandemic in Wuhan, China, and was linked to comorbidity with a mental history of psychiatric problem (**Zheng et al., 2020**).

All demographic factors like age, sex, race, education, It was used to measure the past month's symptoms of anxiety and depression and use to help easily find to patients (**Kroenke et al., 2009**). Repetitive actions to calm anxiety may develop into habits that can cause problems with memory, concentration, and physical illness. (**Van den Hout and Kindt, 2003; - men et al., 2008**).

Additionally, there are a few individual OCD vulnerability characteristics to consider. Earlier research revealed that pathological doubt is linked to worsened treatment response and increased impairment in OCD sufferers (**Marton et al., 2019**).

The pandemic and the implemented preventive measures caused several emotional and psychological problems, including dread, anxiety, depression, and suicidal ideation (**Pedrosa et al., 2020**).

As of May 31st, the WHO reported 5,939,234 confirmed cases across the globe, along with 367,255 fatalities. India has reported approx. 190,600 confirmed cases and at least 5,408 availability for cure from COVID-19 since the previously incidence on January 30, 2020. (**D. Singh et al., 2020**). In Indian, infected people are devised in to different area like red area have more positive cases, and orange area have moderate cases and green area have very less case of corona viruses (**Kosanke, 2019**).

### Post covid behavioural changes like depression in people

The impact of the corona viruses crisis on mental health has been mixed. The first pandemic wave was mainly linked to increased adolescent internalizing symptoms, specifically anxiety, depression, and eating disorders (**Patwekar et al., 2022**).

The impact on externalizing symptoms was less evident and primarily relevant to adolescents with pre-existing behaviours (**Verma & Naveen, 2021**). Many nations reported increased suicide ideation and attempts among adolescents during the second and later waves of the pandemics of confinement, particularly in households wherewith violence, illness, or unemployment, may reflect adverse childhood experiences and raise the risk in adolescents (**Husain et al., 2021**).

Additionally, depression and loneliness are risk factors for teen suicide. Lockdown procedures may therefore have made adolescents more susceptible to SB. Reports from before However, reports from before and after the confinement measures (**Diaz et al., 2021**).

Common mental health issues are anticipated to become more prevalent in the after pandemic period due to the pandemic's long-term impacts, restrictive measures like social seclusion, economic repercussions, and social isolation (**G. P. Singh & Jaswal, 2022**).

Just after the quarantine period, many experience emotional instability, rage, insomnia, despondency, and post-traumatic stress symptoms (**Matiza, 2020**). In this COVID-19 pandemic, there is a need to ramp up the awareness campaign and address peoples' mental health difficulties. Research hasn't assessed how people felt about their mental health during the COVID-19 pandemic (**Rawat et al., 2021**). Planning successful intervention techniques for various populations (including general people, COVID-19 cases, close contact with COVID-19, and healthcare personnel) requires research into the effects of mental health on those groups (**Roy et al. 2020**).

The population's behaviour may be impacted by preventative measures, such as quarantine, social isolation, and social distancing, which may result in psychiatric illnesses (**Pedrosa et al., 2020**).

Participants' anxiety levels, well-being, and exposure to nature were all assessed via an online survey (**N. Das, 2020**). According to the findings, just 22.4% of those who were already active became less active, compared to 40.5% of those who were not. Comparatively, 40.3% of already active increased their activity stage, while 33% of those who weren't active did so (**Nienhuis and Lesser 2020**).

Dramatic changes in sleep, substance usage, physical activity, and food have been reported in the media. These changes could later impact mental health (**Journal, n.d.**). We briefly examine the connection between healthy habits and mental good health and potential changes in these areas brought on by pandemic preparedness measures (**Arora & Grey, 2020**).

According to reports, teenagers' struggles with mental health have been on the rise in prior health crises (**Chaturvedi et al., 2021**). As a result, during the pandemic, teens' perceived health decreased. Compared to the general population, the lockdown affected adolescents with mental illnesses much more (**Bera et al., 2022**).

This pandemic harmed people's physical health and caused significant changes in their lifestyles. India has a well-known healthcare delivery system (**Lappan et al., 2020**). However, there is a growing problem due to a lack of organized infrastructure. A sense of crisis, as the maximum of its population (66.53%) lives in Rural areas afflicted by wide disparities related to the provision of healthcare services (**Kathirvel, 2020**).

We discovered that 63 percent of participants watched internet news on novel coronaviruses regularly, 33 percent watched it occasionally, and 4 percent never watched online information about them (**Zewude et al., 2021**).

The News on television was managed frequently by 51% of participants, sometimes by 36%, and never by 13% (**Echaniz et al., 2021**). Newspapers were also read regularly by 24 percent of participants and occasionally by 36 percent of participants to check on COVID-19 updates. Forty percent of those polled said they never read newspapers for COVID-19 updates (**Kosanke, 2019**).

The pandemic-born lockdown is affecting people's living habits and social behaviour. Because of responses to working from home, the lockdown situation has changed the rituals and the population's habits and way of life implement their conditions (**Lokhandwala & Gautam, 2020**). Many employees have worked from home. Since the lockdown, 40% of employee have agreed to use more internet data for official work, and 31% have used more internet data than usual to access social media (**Journal, n.d.**).

### Post covid behavioural changes in socializing

Consumer spending on a nation's trademark and goods produced there significantly contributes to that nation's GDP and helps the economy of that nation recover. (**Radhamani et al., 2021**). This research focuses on identifying the factors that influence consumer purchasing behaviour model modelling factors to determine the causal relationship using partial least squares structural equation modelling (**Sinha et al., 2020**).

Lockdown is frequently associated with negative psychological consequences, some of which can last for years. Lockdown for indefinite periods is associated with worse mental health outcomes (**Chew & Lopez, 2021**). Lockdown is frequently an unpleasant experience for young adolescent boys and girls, who are more socially active than others Separation from loved ones, loss of freedom, uncertainty about disease status, and boredom can all have dramatic emotional consequences. (**Papri, 2020**).

COVID-19 and the added difficulties brought on by these barriers make it more challenging to adhere to social segregation policies (**Kumar & Dwivedi, 2020**). For instance, people with disabilities may depend on accessible public transit, schedule routine medical or rehabilitation visits, require constant supervision from



caregivers or medical professionals to do their daily tasks, or have limited facial mask communication abilities (**Padmakumar & Patil, 2020**).

During the covid period, Some gave up and wanted to end their lives, while the vast majority attempted suicide. (**Chew & Lopez, 2021**). Some people found themselves unemployed. Fear and worry, home confinement, lifestyle changes, precautions, and coping mechanisms(**Mohebi et al., 2018**).

People suddenly discovered themselves, fight for hunger and pain. It was the most challenging war, fighting for survival and taking up arms against the unknown, and this impact also seems in post covid situation (**Patwekar et al., 2022**). The current study highlights the effects of a state-wide lockdown on society and the environment while looking into possible lifestyle changes. This study was based on a structured online survey with over 1000 responses from respondents across the nation. (**Kosanke, 2019**).

Because of responses about work from the lockdown situation, the given population's habits and way of life have changed. Since implementing the lockdown condition, 55% of participants have worked from home (**N. Das, 2020**). Since the lockdown, 40% of participants acknowledged using more data on the internet for work-related purposes, while 31% admitted using more data than usual to access social media (**Journal, n.d.**).

The COVID-19 outbreak has caused people to face new challenges. There are emotional, behavioural, and psychological costs to the public in addition to the spread of viruses and disease mortality among at-risk people(**Summers et al., 2021**).

The population's behaviour may be impacted by preventative measures, such as quarantine, social isolation, and social distancing, which may result in psychiatric illnesses (**D. Singh et al., 2020**). Dread, anxiety, sadness, and suicidal ideation are just a few of the emotional and psychological issues brought on by the pandemic and the social preventive measures put in place(**Pedrosa et al., 2020**).

In the instance of COVID-19's effects on people's financial transactions in Madhya Pradesh (MP) (**Madan et al., 2021**). The respondents worked in the service industry or were business owners. The COVID-19 epidemic and changes in individual investors' investing choices regarding SIPs were analysed (**Rakshit & Paul, 2020**).

There was a strong correlation between individual income and COVID-19 prevention measures (such as lockdown and travel limitations), which directly impacted saving and investing habits (**Shukla et al., 2021**). Respondents said that during the COVID-19 outbreak, SIP investments plummeted by 43%. Despite a fall in investment across the board for both sexes, the difference in percentage decline was statistically insignificant (**Nienhuis & Lesser, 2020**). In addition, investor age had little bearing on their investment habits (**Gurbaxani & Gupta, 2021**).

Fear and anxiety of some common psychological responses to disasters (**Dong & Bouey, 2020**). Recessions and social setbacks are more likely to affect low- and middle-income countries like India than higher-income ones, which are currently going through harsher ones. (**N. Das, 2020**).

The During the COVID-19 pandemic, the enormous burden and vulnerability imposed by noncommunicable diseases (NCDs) highlighted the importance of prioritising healthy lifestyle behaviours and the well-being of people living with NCDs(**Azzouzi et al., 2022**). The numerous dynamic aspects that affect physical activity behaviour imply that public health limitations may impact physical activity behaviour on several levels (**Nienhuis & Lesser, 2020**).

Similar to business travels, the structural analysis of leisure trips indicates that age positively affects awareness and negatively impacts conformity (**Chew & Lopez, 2021**). Additionally, the respondent's urban inhabitant significantly negatively moves the agreement. The income of the respondents had a favourable effect on awareness (**Aaditya & Rahul, 2021**).

Adopting new technologies differs depending on socioeconomic status, gender, age, ethnicity, and other demographic factors As a result, monitoring and quantifying changes in high-risk, vulnerable populations may be difficult. (**Mohebi et al., 2018**).

Big data analytics could be used to standardize processes for cross-country studies by combining information on Physiological Awareness and health with the environment (**Birditt et al., 2021**). the state of the transportation system, and local conditions. Challenges with privacy and data protection must also be considered in studies (**Singh & Jaswal, 2022**).

### **Post covid behavioural changes in health and hygiene**

Protective health practices are of particular public concern during a worldwide pandemic, with health organizations and governments emphasizing their significance in stopping the spread of SARS-Cov- illnesses

(Bavel et al., 2020). Public transportation mode preferences during travel time, from public transit to driving, are closely correlated with overcrowding and hygiene (Birditt et al., 2021). Evaluating commuters' opinions of various public transportation promotion tactics will help shape post-COVID transportation regulations (S. Das et al., 2021).

The shift in consumer behaviour related to Key demographic factors such as age and household income influence food necessity and dietary products, health and hygiene, work their life style changes, and social interaction affected. (Sikandar & Jain, 2021). People may have to live with it for a while and resist infection by adhering to strict social distancing and hygiene guidelines, as there is too significant an economic imbalance (Nicola et al., 2020).

The COVID-19 pandemic situation changes so adopting the social distancing strategies (SDPs) have caused temporal and geographic changes in water consumption across cities (Kathirvel, 2020). To respond to potential operational and water quality issues, water utilities need to identify these shifts in demand (Dangi et al., 2020). With our empirical results, utilities can address possible weaknesses in their systems, such as issues with water quality that might be caused by fluctuations in water pressure in response to demand variations (Bachchan et al., 2020).

Masks will become more socially acceptable in low- and middle-income countries during periods of high air pollution, potentially reducing exposure to air pollution (Bherwani et al., 2020). Despite the fact that the pandemic is over, some air pollution reduce strategies, such as carpooling and mass transit use for commuting, may be impacted in order to avoid exposure to airborne infections such as coronavirus. (Azzouzi et al., 2022). To increase awareness of cleanliness issues, this demand concentrates on making a town more walkable for individuals of all ages and groups, including the community of people with disabilities. (Ravindra et al., 2022).

### **Post covid behavioural changes to afraid to go out**

According to this study, after 15 days of lockdown, 73.26 percent of kids experience extreme stress after 21 days of lockdown, and 80.86 percent of adolescents experience extreme stress (Rashi et al., 2021). According to research, stress levels are rising daily (Dangi et al., 2020).

We discovered that 63 percent of participants watched internet news on novel coronaviruses regularly, 33 percent watched it occasionally, and 4 percent never watched online information about them (Berezka et al., 2021). Information on television was observed frequently by 51% of participants, occasionally by 36%, and never by 13% (Bachchan et al., 2020). They were also read regularly by 24 percent of participants and occasionally by 36 percent of participants to check on COVID-19 updates. Forty percent of those polled said they never read newspapers for COVID-19 updates (Kosanke, 2019).

The participants overwhelmingly stated that this sickness has caused them to feel afraid. Participants noted that despite being a rare disease, there is a shortage of accurate information regarding it, which has caused uncertainty among the public (Mohebi et al., 2018).

Pandemic anxiety and fear have significantly decreased in the vaccinated population (Roy et al., 2020). Socialization has improved in people who have received the vaccination, which may related for improved mental health (Iodice et al., 2021). The improvement in economic activity was also a significant factor in this behavioural change. Change after the effect of the pandemic situation; people are afraid to go far (D. Singh et al., 2020). During the pandemic, Because many jurisdictions have closed or limited access to familiar indoor and outdoor PA locations, the areas where people can be physically active are changing. (Bandhu et al., 2020). Although some jurisdictions allowed people to exercise on the streets, others did not, forcing millions of people to stay active at home. (G. P. Singh & Jaswal, 2022).

## **METHODOLOGY**

The literature was searched by taking reference to the articles published from 2008-2022. On which collection of data gathered by using The keywords used for the selection of the relevant online articles were 'post covid, hygiene, lifestyle changes.' in the research databases at Wiley, Elsevier, ScienceDirect, SPER, and Academia.

### **Analysis**

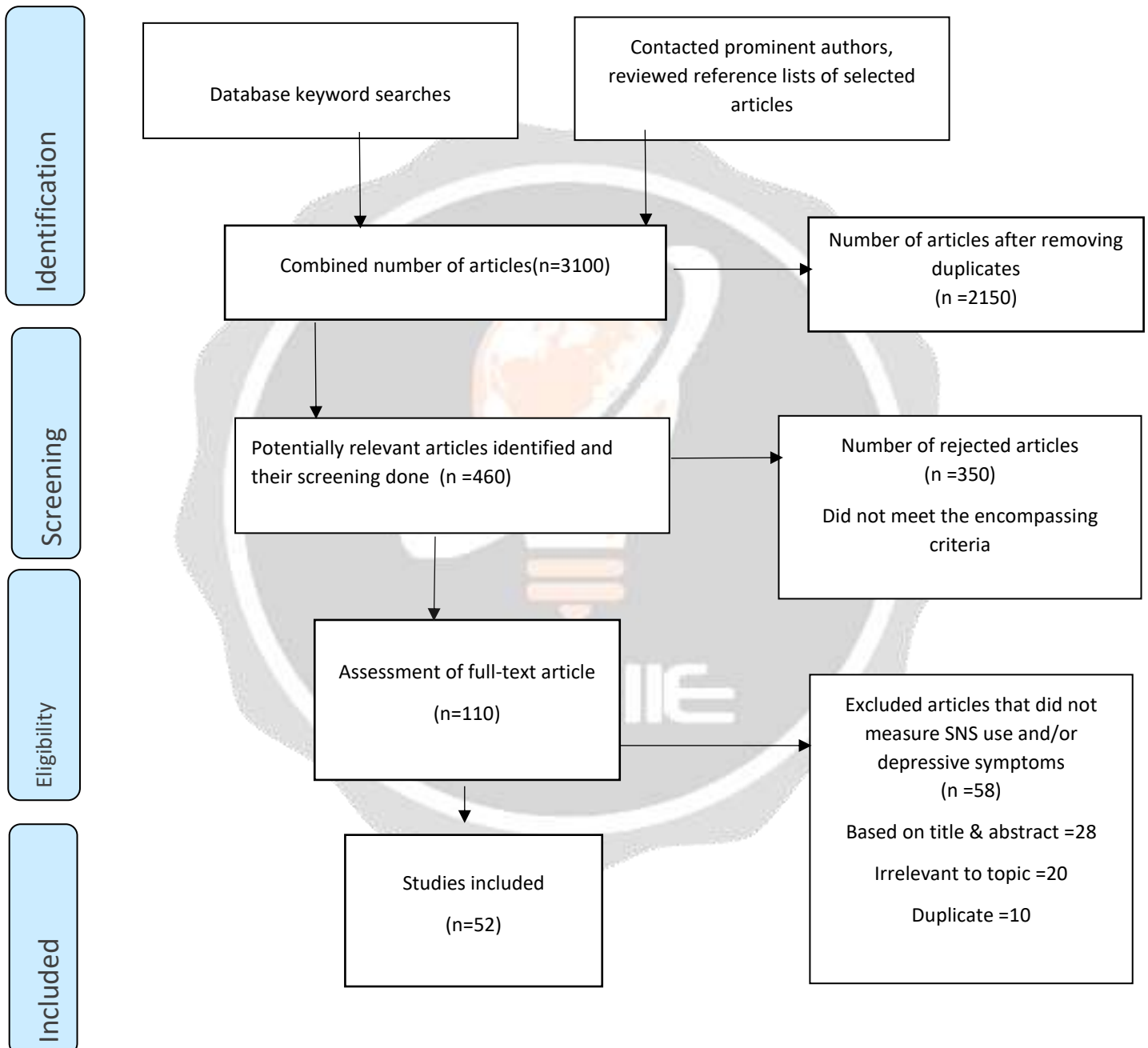
The Preferred Reporting Item for Systemic Reviews and Meta Analytics (PRISMA) technique is the one that is employed. The aims, year of publication, amount of citations, and recommendations for additional research were all taken into consideration when we read and summarised each paper that had made it through the selection process.

### **Inclusion & Exclusion criteria**

That be include in the current study, studies have to meet some criteria.

- a) Studies have included some kind of selection criteria (Post covid changes , behavioural, lifestyle, hygiene ) These criteria limited the number of studies (b) Accordingly excluded the studies in which based on irrelevant information there is no proper Title, Abstract & Review

### **PRISMA Flow Chart**



### **Final data set**

Based on all keywords searched, the research database search yielded 3100 research articles. After scanning the title, the same article was discovered in two different databases. The total number of articles after removing

duplicates is 2150. The total number of articles screened was 460. Because of the inclusion criteria, 350 articles were rejected.

There have been 110 articles accessed for eligibility. The following criteria were used to exclude 58 articles: (28) unrelated to the topic (20) duplication (10).

The final data set consists of 52 articles.

The first study included was published in 2008, and the most recent study was completed in 2022. The diagram depicts the entire procedure.

## Discussion:

Post-COVID conditions were wide range of new, returning, or ongoing health problems that people were experience after contracting the COVID-19 virus. Most COVID patients recover within a few days to a few weeks or few month of infection, so at least four weeks after infection is when post-COVID conditions can be identified. And after that changes in people behavioural observed in this review article we discuss about The impact of the COVID-19 crisis on adolescent mental health has been mixed. The first pandemic wave was mainly linked to increased adolescent internalizing symptoms, specifically anxiety, depression, and eating disorders and there is shift in consumer behaviour related to food habits and dietary patterns, health and hygiene there is Lockdown is frequently an unpleasant experience for young adolescent boys and girls, who are more socially active than others.

## CONCLUSION:-

In that analysis, the researchers have drawn the following conclusions

In the pandemic situation all were weird about their life and lack of infrastructure was a major problem. but after the pandemic post pandemic situation arise in which changes observed in people life style. Also changes in their behaviours lifestyle their afraid to go far due to their perception. But it gave positive side to India that, "not to forget our strength and weaknesses and not underestimate any problem and to be ready for the crisis.

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