

COVID-19-How Confinement Affects the Dietary Habits, Physical Activity, and Lifestyle of Work from Home Population in the State of Gujarat

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ABSTRACT

The COVID-19 pandemic in India is part of the worldwide pandemic of coronavirus disease 2019 caused by severe acute respiratory syndrome coronavirus 2. India, which has the second-highest population in the world, is suffering from COVID-19 disease. By May 18th the country India investigated ~1 lakh (0.1 million) infected cases from COVID-19, and as of 11th July, the cases equalled 8 lakhs. Social distancing and lockdown rules were employed in India due to COVID-19 influenced food habits and lifestyles with potential negative health impact on Indian population. The current research is an attempt to explore physical health; dietary habits; lifestyle changes in working population in state of Gujarat during the lockdown. Approximately, 200 participants from the state of Gujarat were included in the study. They were asked to complete a questionnaire with questions around changes in body weight, junk food consumption or healthy food consumption, physical activities, lifestyle changes before and after the pandemic, sleep quality, screening time, etc.

Keywords: COVID-19 pandemic, Dietary habits, Food consumption, Lifestyles, Physical activity, Working population

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INTRODUCTION

Coronaviruses are enveloped RNA viruses, with a crown-like appearance, found in mammals, particularly in humans and birds. Coronaviruses are known to have mutated and recombined behavior causing respiratory, enteric, hepatic, and neurologic diseases.

The first outbreak of COVID-19 occurred in Wuhan, Hubei Province in early Dec 2019 where several patients with viral pneumonia were found to be epidemiologically associated with the Huanan seafood market in Wuhan.^[1] In the origination of coronavirus cases in India happened due to the abroad connection rather than passing on within the country.^[2] Lockdown, that is, home confinement as a measure to mitigate disease outbreak but can affect physical and mental well-being, sometimes drastically (World Health Organization 2020). Social isolation as a measure to reduce infection curtails access to family, friends, and other social systems that as a consequence can cause loneliness, anxiety, and depression, and motivate greater use of digital devices that may alter and compromise sleep patterns, physical activity (PA), and mental well-being.^[3]

On March 22, Indian Prime Minister Narendra Modi (Narendra Modi) encouraged people to observe India's 2 pm Janata curfew. On March 24, India began its first 21-day blockade. As a result of the lockdown, the number of trips to supermarkets and pharmacies, entertainment and retail, station traffic, parks, and workplaces fell by 64.2%, 70.51%, 65.6%, 46.17, and 60.03%, respectively. Due to the increasing number of COVID19 infections, on April 14, the Indian government announced that the second phase of the blockade would be extended to May 3, and further extended to May 17, and then implemented until May 31. To make the blockade and social isolation effective, India also implemented a quarantine law under the Epidemic Act of 1897. However, compared with North Korean law, this is very trivial because North Korean law imposes on the military to enforce isolation. The country has been divided into regions (red, orange,

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and green) based on the number of infected people living in these regions. The red area is the area with a large number of positive cases, the area with the highest number of cases accounts for more than 80% of the cases in each state of the country, or the observed repetition rate is <4 days. Almost all the metro cities such as Delhi, Mumbai, Kolkata, Hyderabad, Chennai, Bengaluru, and Ahmedabad fall in this category (coronavirus hotspots). Areas with a limited number of cases and without a recent increase in positive cases are classified as orange areas. Areas designated as the Orange Zone include Maharashtra, Uttar Pradesh, Bihar, Rajasthan, Punjab, Tamil Nadu, and Madhya Pradesh. If there are no positive cases of COVID-19, the area is classified as a green zone. The largest number of districts under the Green Zone is found in Assam (30 districts), while Uttar Pradesh, Chhattisgarh, Madhya Pradesh, Arunachal Pradesh, Orissa, and Uttarakhand are the states. The containment area between these areas is the area where individuals are found to be COVID19 positive. Uttar Pradesh has containment zones. Mumbai that accounts for 76% of COVID-19 cases of Maharashtra has containment zones in wards.^[4]

Experts predict that the pandemic will last more than 18 months, and the wave of cases will continue to increase. Strict movement restrictions may be required, which may affect people's lives, damage citizens' health, and limit the ability of medical care services. Overwhelmed, many people must be quarantined and employees shifted to work from home. A better understanding of changes in health-related behaviors, such as diet and PA.^[2] In the present pandemic of COVID-19, it has implemented a number of non-drug policies, such as stay-at-home orders, school suspensions, party bans, movement restrictions, and quarantine to reduce the spread of COVID-19. Workstyle has likely also been affected by these policies. For instance, "working from home (WFH)" policies have been introduced by many companies in response to COVID-19.^[5] People yearn for routine. Therefore, no matter what normal means in the current situation, employers must lay the foundation for employees who work from home to establish and maintain normality, including taking a day to take care of your loved ones. Part of laying the groundwork for normalcy includes establishing and agreeing on goals, along with regular measurement of the progress of goal achievement.^[6] Most of them are white-collar professionals, and their homes have now become their workplaces, schools, and places of leisure. As the economy began to reopen and resume some normal activities, people began to question the possible return of the formal office environment and the impact on employees, while COVID-19 is still active in the community. Many organizations will continue mandating WFH, in the foreseeable future, to avoid making changes related to COVID-19 regulations in their office environment. The emergence of new technologies has completely changed the work model, allowing many employees to work anywhere. However, the blurring of physical and organizational boundaries between work and home can also negatively impact an individual's mental and physical health due to extended hours, lack of or unclear delineation between work and home, and limited support from organizations.^[7] Many jobs become more sedentary. A study conducted in Singapore found that working adults spend 69–76% of their waking time per day for sedentary activities behavior.

During the closing period, due to limited store opening hours, reduced product supply, and limited access to food, eating habits will change. This leads to food stockpiling and unhealthy food choices.^[8] People in such situations are forced to consume fewer fruits, vegetables, and fish, which are rich in antioxidants, and rely on highly processed ones, such as convenient foods, junk foods, and ready-to-eat cereals, which tend to be high in fats, sugar, and salt.^[9] Good diet is a leading an important part of a healthy lifestyle (HL). Combined with PA, diet can help to reach and maintain a healthy weight and promote your overall health. The COVID-19 pandemic and self-isolation and social distancing obligations have altered the shopping habits of ordinary consumers. Many authors report that the eating habits of people of different age groups have changed during the pandemic in various countries. Most commonly, the changes involved the entrenchment of adverse eating habits.^[10] Further, the disturbance of the routine work caused by the lockdown could result in monotonous lifestyle that leads to consumption of higher calories.^[11] The public health recommendations (i.e., stay-at-home orders, closures of parks, gymnasiums, and fitness centers) to prevent severe acute respiratory syndrome coronavirus 2 spread have the potential to reduce daily PA. These recommendations are

unfortunate because daily exercise may help combat the disease by boosting our immune systems and counteracting some of the co-morbidities such as obesity, diabetes, hypertension, and serious heart conditions. Lifestyle behaviors, including dietary changes, restricting PA, and the effects of increasing screens and indoor time, remain an under-researched topic. Area of note, toward the end of the SARS epidemic, social support, mental health awareness, and other lifestyle changes (exercise, more time for relaxation, and restorative sleep) were all associated with decreased perceived stress.^[12]

Hence, in this analysis, we sought to identify patterns of change in eating habits, PA, and other health-related behaviors while work from home, quarantine, or home isolation during COVID-19 pandemic in the world and to identify associations with sociodemographic factors and usual habits and lifestyle.^[2]

METHODOLOGY

This is a questionnaire-based survey; relevant information, and data have been collected from various publications in journals, articles, research papers, etc., available online. Whatever relevant articles or studies were available in the electronic form were examined and put to review.

A brief review of the related study involves opinions of different authors, scholars etc. And also evaluates reports of research work related to actual research proposed to be undertaken. COVID-19 pandemic effects the lifestyle; dietary habits; PA; its impact on work from the home population; consumption of food.

RESULTS AND DISCUSSIONS

WFH

Participants reported 4,444 work patterns before and after the COVID-19 outbreak. Participants were asked to indicate the total number of working and non-working days in a typical week before and after the first major event. Outbreak of COVID-19 in early April 2020. For working days, participants also reported the total number of days they worked at their place of employment or worked from home. To overcome the present situation, the company is trying to run office and administrative work through the "work from home" model. The company is trying to use disruptive technology to deal with the economic turmoil caused by COVID-19 by WFH. Previously, WFH was just an acceptable business practice in IT and technology fields. However, other industry sectors are reluctant to adopt the WFH as a good business practice. Due to the spread of the global pandemic, the biggest business change we can see today is that many companies are forced to implement a work-from-home model for their employees. In the past 2 months, the company has found that the WFH has delivered significant benefits. Looking ahead, most companies view the WFH as a complete business model. The WFH model is helping some functional departments and industries to keep their operations on a limited basis. This research work looks at the positives and negatives of the concept of WFH, as during this COVID-19 crisis, people working at the WFH are forced to live in social isolation and emotional alienation. Can balance work and life responsibilities, especially when life area requires as much attention as work, in these difficult times. The study has focused on the impact of COVID-19 virus pandemic on working life of

employees.^[9,13] During the COVID19 outbreak, WFH self-reported outreach activities increased compared to before the pandemic. Before the pandemic, only 12% of workers reported high or very high WFH, and this proportion increased to 76% during the COVID19 outbreak. Self-reported changes in working conditions during the pandemic.^[14]

Dietary Habits and Food Consumption

The agreement includes a previously used and validated short semi-quantitative Food Frequency Questionnaire (FFQ) on general food and beverage consumption, using last year as the reference period. It consists of 24 items with response options: Never; once a month or less; 2–3 times a month; once a week; 2–3 times a week; 4–5 times a week; once a day; several times. The short FFQ intended to capture the overall profile of usual diet.^[2]

Other consequences of prolonged quarantine include altered nutritional intake, for example, overeating, during quarantine, our diet is altered to include foods with a long shelf-life, again, due to limited access for outdoor food purchases, dietary patterns have changed to include increased reliance on delivered foods, and access to healthy food options has diminished. Most takeout food is fast food, such as pizza, hamburger, fried chicken, and sugary or soda drinks. These foods can be more prone to obesity than homemade foods. Increased consumption of these foods.^[15,16] Many people think that eating late at night is an unfavorable eating pattern, because studies have shown that there is a link between eating at night and the development of metabolic syndromes. A healthy diet is important for regulating the process of inflammation and oxidative stress. Several studies have reported a direct link between adherence to the Mediterranean diet (DM) and lower overall cancer-related mortality. The DM is a typical dietary pattern. The DM has attracted the attention of the food science community, because it is reported to prevent chronic diseases and benefit health. In recent decades, some epidemiological and experimental studies have analyzed the beneficial effects of the DM in reducing the incidence of clinical events of atherosclerosis in the population of the DM. Rome. Snacks mostly consisted of energy-dense and non-nutrient-rich foods. People's increased consumption of "comfort foods" such as chocolate, ice cream, and desserts during lockdown.^[17] A healthy diet is important for regulating the process of inflammation and oxidative stress. Several studies have reported a direct link between adherence to the DM and lower overall cancer-related mortality. The DM is a typical dietary pattern. The DM has attracted the attention of the food science community because it is reported to prevent chronic diseases and benefit health. In recent decades, some epidemiological and experimental studies have analyzed the beneficial effects of the DM in reducing the incidence of clinical events of atherosclerosis in the population of the DM. Essentially, the traditional DM is characterized by a high intake of fruits, vegetables, cereals, leguminous, and seeds; with olive oil.^[18]

PA

PA and Sedentary Time Current PA recommendations indicate that adults should engage in 150–300 min of moderate-intensity activity per week. To this end, adults should get at least 30 min of moderate-intensity activity five or more days a week. Milton *et al.* A single measure to assess adequate PA was developed and tested for use in various settings. The questionnaire asked about the

general practice of moderate to severe PA for at least 30 minutes. Answer options: Never; <1 day a week, 2 days a week; 3–4 days a week; five or more days a week. Another item asked about moderate to vigorous (at least 30 minutes) PA practice during confinement. A third question inquired about the time dedicated to sedentary activities daily during confinement.^[2] PA plays an essential role in the achievement of the beneficial effects of the food in health, as they are like a tandem that always must be together: Healthy diet and physical exercise. Concerning our studied sample, 28.8% did not practice any PA before confinement, which slightly increased to 29.4% during confinement.^[19]

Lifestyle

The population were asked about the frequency of exposure to the sun through windows, balconies, terraces, or gardens during confinement for at least 10 min. Similarly, one element asks about the habit of smoking, and another element asks about the change in this habit during confinement. Information on sleep quality during confinement.^[2] Regarding lifestyle guidelines, recent reviews have emphasized the role of maintaining a healthy nutritional status and engaging in physical exercise at home in the management of COVID-19 outbreak. HL behaviors have been consistently associated with reduced all-cause mortality, and increased lifespan and wellbeing. Unhealthy behaviors (poor-quality diet, lack of physical exercise, tobacco and alcohol use) are major contributors to the global burden of disease and have also been associated with worse outcomes across psychiatric disorders.^[12]

CONCLUSION

In short, during the COVID19 lockdown period, the different patterns of changes in adult eating habits. People who are generally less active are more likely to be classified as having increased FA during childbirth. These different patterns of lifestyle changes during labor indicate the need for personalized support and counseling for different groups of people. In this time of uncertainty, it is necessary to convey clear messages to people that emphasize the importance of following healthy eating patterns, such as a DM and lifestyle, adequate levels of PA, outdoor activities where possible, and promoting recovery. Strength and emotion balance in the individual, therefore, adequate water, a balanced diet, meeting daily energy needs, adequate time and quality of sleep, regular PA, and positive thinking are the best ways of improving the physical and mental wellbeing of work from the home population.

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