

LIFESTYLE CHANGES DUE TO COVID 19 – A STUDY AMONG INDIVIDUALS

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Abstract

COVID – 19 disease is a global threat which has affected the lifestyle behaviors of many individuals. The impact of these life style changes bought by the virus has challenged health care systems, and disrupted everyday living in a way that no one imagined before. This study is an attempt to summarize the lifestyle changes that occurred as a result of COVID -19 pandemic among the individuals of Thrissur district. The study focus on six factors influencing lifestyle behavior such as dietary habits, mental and physical discipline, job related matters, income and expense balance techniques, family related matters, smoking habit and alcohol consumption. There are 84 samples selected for the study. Primary data were collected using Google form questionnaire. Responses were collected using five point scale (No change, Increased, Decreased, Not clear, I prefer not to answer). Convenient sampling method is used for the study. Data analysis is done using SPSS 20.0 software. The study revealed that the respondents have become more cautious about their physical and mental health by refraining from fast food intake, indulging in leisure time activities and by increasing the intake of fruits, vegetables and immunity boosting food. A strong family bonding has been observed during this pandemic period. This study reveals the attempt to have the balance between income and expenditure within the family.

Keywords: dietary habits, physical and mental discipline, job related matters, family matters, income and expense balance, other behaviors, lifestyle changes.

Introduction

Coronavirus disease 2019(COVID – 19) is a contagious disease caused by severe acute respiratory syndrome corona virus 2 (SARS- CoV – 2). The first case was identified in Wuhan, China, in December 2019. The disease has now spread worldwide, leading to an ongoing pandemic. The global population is experiencing life altering changes due to COVID 19 pandemic. COVID-19 has left hundreds of people at risk for serious illness or death, isolated in their homes and without job or income. These circumstances made people living with anxiety, depression, or other mental health challenges. It has also taken education to a new level by offering online classes and coaching sessions. Even the primary school children are attending classes virtually. This has made a change in the routine time schedule of a family. Moreover People have become more hygiene conscious to fight against COVID 19. Though washing hands and sanitizing materials before use had started as a compulsion, now have become a routine. Another major change that happened because of this pandemic is that work from home has become a part of our lives. This has made our women employees little worried, for they are juggling between cooking, parenting and working at the same time. People from all walks of life seems to have absorbed the alterations made by COVID 19.

The World Health Organization (WHO) declared COVID -19 as a public health emergency of international concern on 30th January 2020. The actions taken by the public health ministry to control the spread of the virus indirectly affected food availability, normal daily activities, access to recreational public settings, social activities, work and financial security. All these factors together brought change in lifestyle-related behaviors, especially food habits, daily physical and mental activities and sleep behaviors. Lifestyle factors are essential moderators of physical and mental health. Many diseases and disorders today are preventable and can be managed with the right lifestyle choices.

The term “lifestyle” refers to the way or style of living. The habits, attitudes, tastes, moral standards and economic level together constitute the lifestyle of an individual. In the case of India, with a population of more than 1.34 billion—the second largest population in the world The Ministry of

Health and Family Welfare has raised awareness about the outbreak and has taken necessary actions to control the spread of COVID-19. Moreover, the Indian government implemented a 55-days lockdown throughout the country that started on March 25th, 2020, to reduce the transmission of the virus. This outbreak is inextricably linked to the economy of the nation, as it has dramatically impeded industrial sectors because people worldwide are currently cautious about engaging in business in the affected regions. The self-isolation and restrictions on physical mobility due to the lockdown caused major changes to routines in life and hindered the ability to meet regular responsibilities—potentially affecting the physical and mental health of individuals. Recent studies have reported higher levels of stress, anxiety, depression, and poor quality of life during the COVID-19 crisis in different populations. This could have increased the intensity of negative psychological outcomes among Indians, leading to a poorer quality of life not just during the lockdown but also after the crisis. While mental health effects due to the lockdown are likely to be seen among a majority of Indian adults, the impact of a lockdown extended over longer periods might differ across vulnerable groups. For instance, the stress experienced by persons with limited adaptive capacity, financially backward, lower social support, and pre-existing mental health conditions might be higher than among those who do not share these characteristics. With longer lockdown periods, financially weaker individuals might face more challenges in meeting the basic needs of their families. Moreover, the continued restrictions on physical mobility could place a higher burden on the social networks of vulnerable individuals, thus reducing their access to social support over time and impacting their adaptability.

In India, Kerala was the first state affected by COVID-19, and the first coronavirus case was confirmed in Thrissur district on 30 January 2020. By early March the state soon had the highest number of active cases in India mainly due to a huge number of cases imported from other countries and states. As of today, the state is among those with a high recovery rate, low death rate and slow progression of COVID-19 cases in the country, and has been recognized for its efforts by policymakers, public, researchers and clinicians, in India and internationally. Despite having a low per capita income, the state has its social development indicators, such as human development index, infant mortality rate, sex ratio and female literacy rates, comparable to those of many developed countries. Several key strategies implemented by the state; surveillance, good quality quarantine, testing strategies, uninterrupted treatment services, community participation, proactive care of elderly and people with comorbidity and educational and social mobilization of behavioral change, contributed to effective management and control of COVID-19 in Kerala.

Our study aims to document dramatic changes in dietary habits, physical activity, sleep pattern, time use, and mental health. We show that biometric and time-use data are critical for understanding the mental health impacts of COVID-19, as the pandemic has tightened the link between lifestyle behaviors and depression.

Statement of the problem

As a result of lockdowns imposed due to COVID 19, people all over the world are experiencing life altering changes. It is important to evaluate the degree to which the factors affecting our life style have been changed during COVID 19 in comparison with the period before COVID – 19. This can be done by investigating some key questions about dietary habits, physical and mental health factors, income and expenditure balancing techniques and some other behaviors as well. The answers to these questions will help to understand the change in life style during COVID-19 on these behaviours, and thus lead us in establishing a fundamental basis to develop appropriate recommendations for lifestyle modifications during this time. There is lack of evidence for the studies that evaluate the life style changes in India. So our study to understand the lifestyle changes that happened because of COVID 19 has a great significance in this context.

Objectives of the study

- To identify the lifestyle changes experienced by individuals during COVID-19 pandemic.
- To understand the impact of lifestyle changes on physical and mental health of individuals.

Hypothesis

H0: There is association between age and dietary habits.

H1: There is no association between age and dietary habits.

Review of Literature

Sosa M, Cardinal P, Elizagoyen E, Rodríguez G, Arce S, et al. (November 2020) conducted a comparative study on “Eating habits and lifestyle changes during the COVID-19 lockdown” (before and after). The aim of this study was to analyze eating habits and lifestyle changes during the COVID-19 lockdown on the 9 de Julio city, Bs. As., Argentina. During isolation, the frequency of purchases decreased. It was observed an increase in the consumption of pasta, bread and cakes. Concerning the physical activity, approximately 70% declared to train before the COVID-19 lockdown, decreased by 13% during the lockdown. Other activities conducted during the COVID-19 lockdown; the most mentioned were cleaning the house, cooking, watching television, series and movies. A percentage greater than 50% of the surveyed population associated the situation of lockdown with positive emotions (share with my family, stay at home); while only 24% associate it with negative emotions (anxiety, anguish, fear). It is expected that most habits will return to normal, however, it would be interesting to know which of those developed, adopted and implemented during lockdown will remain in the new normality.

Eyasu Siyum Buda; Lolemo Kelbiso Hanfore; et al (December 2017) “Lifestyle modification practice and associated factors among diagnosed hypertensive patients in selected hospitals,” South Ethiopia. They studied that hypertension is one of the leading causes of disability and death in both developed and developing countries that need urgent strategies to implement interventions that control it. Appropriate lifestyle changes often called non-pharmacological approaches that often overlooked are the corner stone of the prevention and control of hypertension. The aim of this study is to assess the practice of lifestyle modifications and associated factors among diagnosed hypertensive patients in Durame and Nigist Elleni Mohamed Memorial General Hospitals in southern Ethiopia.

Femke Driehuis; Jeroen C.M. Barte; et al (August 2012) “Maintenance of lifestyle changes: 3-Year results of the Groningen Overweight and Lifestyle study. This study evaluated the three-year effect of lifestyle counseling by a nurse practitioner (NP) on physical activity (PA) and dietary intake compared with usual care by a general practitioner (GP). After three years, leisure-time activity increased and favorable improvements towards a healthy diet were made for both groups. These three-year changes in PA and diet did not differ significantly between groups. Changes in PA and dietary habits after one year were practically maintained after 3 years, because only small relapses were found. After three years, subjects were more physically active and had a healthier diet compared to baseline. Lifestyle counseling by NP resulted in similar lifestyle changes compared to GP consultation.

Dimple Rawat; Vivek Dixit; et al (January 2021) “Impact of COVID-19 outbreak on lifestyle behavior” A review of studies published in India. This review is an attempt to summarize the effect of pandemic COVID-19 on lifestyle behaviour among the Indian population. A review was carried out to summarize the effect of pandemic COVID-19 on lifestyle behaviour focusing on changes in dietary or eating behavior, stress, sleep pattern, and level of physical activity among the Indian population. A total of 11 studies (n = 5957, age group 18–70 years, comprising both genders) consisting of 1 hospital and 10 community based, were included in the present review. A change in lifestyle behavior was observed due to COVID-19. Psychosocial or any kind of mental stress among the participants was found to be prevalent. Weight gain and decline in physical activity were also observed. Not only sleep quantity but sleep quality was also found to be affected due to COVID-19. The present review indicates the need for lifestyle behaviour programmes via using the platform of E-media and also for the dissemination of health education.

Teresa Arora; Ian Grey (June 2020) “Health behaviour changes during COVID-19 and the potential consequences” In this mini-review, they reviewed that the COVID-19 pandemic has brought about profound changes to social behaviour. While calls to identify mental health effects that

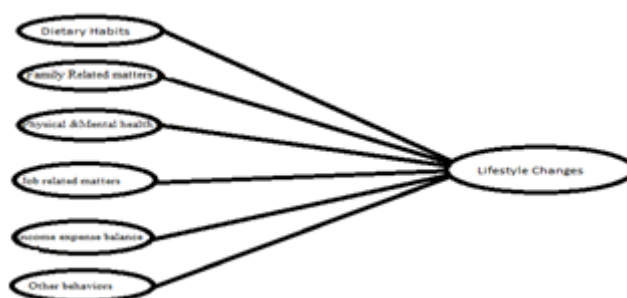
may stem from these changes should be heeded, there is also a need to examine potential changes with respect to health behaviours. Media reports have signalled dramatic shifts in sleep, substance use, physical activity and diet, which may have subsequent downstream mental health consequences. We briefly discuss the interplay between health behaviours and mental health, and the possible changes in these areas resulting from anti-pandemic measures. We also highlight a call for greater research efforts to address the short and long-term consequences of changes to health behaviours.

AshokSekar ; Roger Chen ; Eric Williams (March 2018) “Changes in Time Use and Their Effect on Energy Consumption in the United States”. This study reveals the energy effects induced by lifestyle shifts via tradeoffs in time spent in performing activities. We use the American Time Use Survey to find changes in times performing different activities from 2003 to 2012. The results show that Americans are spending considerably more time at home (7.8 days more in 2012 compared with 2003). This increased home time is counterbalanced by decreased time spent traveling (1.2 days less in 2012 versus 2003) and in non-residential buildings (6.7 days less in 2012 versus 2003). Increased residential time is mainly due to increased work at home, video watching, and computer use. Decomposition analysis is then used to estimate effects on energy consumption, indicating that more time at home and less on travel and in non-residential buildings reduced national energy demand by 1,700 trillion BTU in 2012, 1.8% of the national total.

Research Methodology

Primary data as well as secondary data are used for the study. The primary data are collected from 84 respondents including male and female residing in Thrissur district. A well-structured questionnaire is used for collecting the data. The first part of the questionnaire includes socio- economic profile of the respondents and second part includes twenty seven questions related to the objectives formulated for the study. The secondary data are collected from papers, published articles in journals, newspapers, magazines and websites. The electronic survey questionnaire was designed to identify the changes in multiple lifestyle-related behaviors such as dietary habits, physical and mental activity, income and expenditure and other health related behaviors during the COVID-19 outbreak. The participants answered various questions on the changes experienced in lifestyle during COVID 19 period compared to their life before COVID 19. Convenient sampling method is used for the study. Simple percentage is used to obtain the results of the study. Chi-square test also has been used to analyze the association between age and dietary habits.

Research model



Results and Discussion

Table 1 : Demographic details of the respondents

Characteristics	Frequency	Percentage
Age group		
< 25	29	34.90
25 -40	17	20.5
41 - 50	22	26.5
> 50	15	18.1

Gender		
Male	33	39.8
Female	50	60.2
Marital status		
Married	52	62.7
Single	31	37.3
Family		
Nuclear Family	57	68.7
Extended family	15	18.1
Joint family	11	13.2
Occupation		
Self employed	15	18.1
Government	12	14.5
Private sector	17	20.5
Professionals	9	10.8
Others	30	36.1
Monthly Income		
< 10000	31	37.3
10000 - 30000	23	27.7
> 30000	29	34.9

Source: Primary data

In this study the characteristics such as age group, gender, marital status, family, occupation, and monthly income are selected to collect the demographic details of the respondents. The above table shows that 60.2% female respondents and 39.2% male respondents are involved in the study. 34.9% of the respondents are below 25 years old, while 26.5% are between 41 to 50 years old. 62.7% of the respondents are married and 37.3% are single. 68.7% are having nuclear family, while 18.1% have extended family. This study involves 18.1% self-employed people, 14.5% government employees, 20.5% are working in private sector, and 10.8% are professionals. 34.9% of the participants of this study are earning more than Rs. 30000 per month while 37.3% are earning less than Rs. 10000 per month.

Table 2 : Responses for various questions related to six different factors affecting the lifestyle

Responses in percentage					
Factors	No change	Decreased	Increased	Not clear	I prefer not to answer
Dietary habits					
Regular meal	45.8	20.5	27.7	1.2	4.8
Fruits & veg intake	28.8	8.4	61.6	0	1.2
Restaurant/fast food	10.8	78.3	7.25	1.2	2.4
Balanced diet	36.1	4.8	48.2	7.2	3.6
Immunity boosting food	24.1	2.4	66.3	3.6	3.6
Emotional eating	39.8	10.8	37.3	4.8	7.2
Family related matters					
Caring your kids	18.10	12	44.6	1.2	24.1
House hold tasks	34.9	4.8	57.8	1.2	1.2
Interaction with the family members	21.7	18.1	56.6	2.4	1.2
Physical and Mental discipline					
Leisure time activities	26.25	8.3	61.9	1.2	2.4
Anxiety about future	29.8	4.8	60.7	2.4	2.4
Time taken to relax	23.8	17.9	54.8	2.4	1.2
Physical exercising	34.5	29.7	29.8	0	6
Time spend on Meditation and Yoga	46.4	15.5	19	6	13.1

Time spend on spiritual activities	38.1	20.2	33.3	3.6	4.8
Hours of sleep	38.1	21.4	39.3	1.2	0
Job related matters					
Job satisfaction level	40.5	36.9	8.3	0	14.3
No.of hours of working	36.9	21.4	31	1.2	9.5
Monthly salary	51.2	21.4	4.8	2.4	20.2
Income and expenditure					
Grocery shopping	39.3	35.7	10.7	8.3	6
Textile shopping	17.9	71.4	6	1.2	3.6
Family expense	28.6	39.3	22.6	2.4	7.1
Other Behaviors					
Smoking habit	28.6	2.4	2.4	10.7	56
Alcohol Consumption	27.4	7.1	4.8	7.1	53.6
Time spend on social media	29.8	13.1	57.1	0	0
Social support	42.9	19	26.2	6	6
	No change	Deteriorated	Improved	Not clear	Prefer not to answer
Impact of lifestyle changes in overall health and well being	23.8	22.6	45.2	4.8	3.6

Source: Primary data

In the above table there are 26 questions related to various factors. Participants reported that the habit of fruits and vegetable intake and immunity boosting food intake has increased (61.6% and 66.3% resp.). More than half of the respondents (57.8%) find more time to accomplish their household tasks. Majority of the respondents (54.8%) get more time to relax, and a good percentage of the participants' (61.9%) leisure time activities have been increased. The participants refraining from textile shopping has increased (71.4%) during COVID -19. Time spend on social media has increased for 57.1% of the respondents. 45.2% of the respondents claim that their overall health and wellbeing has been improved due to the lifestyle changes during COVID-19, whereas 22.6% of the respondents feel worsened health condition, and 23.8% of the respondents do not feel any change in their health during COVID 19 period.

Table 3:Chi-Square Test

Value	df	Asymp. Sig. (2-sided)
179.334 ^a	51	.000
179.320	51	.000
68.848	1	.000
84		

The above table shows the Chi-Square test for testing the association between age and dietary habits of individuals. And the test result shows the calculated value is less than the alpha level of significance 0.05, This shows that there is a statistical association between the age and dietary habits of individuals.

Findings

- A decrease in total fast food consumption is reported among the respondents during this pandemic period.
- Majority of the respondents focus on their health by increasing the intake of immunity boosting food and by consuming good amount of fruits & vegetables.
- Most family members spending much more time within the family by taking care of their kids and interacting each other. This helps in strengthening the bonds within the family.
- An increased level of anxiety about future has been developed in most of the respondents during this time.
- Not many respondents are suffering from salary deduction, majority are receiving the same remuneration as before pandemic.
- A slightly higher percentage of the respondents reported a declined family expense during COVID-19 pandemic period.

- Respondents observed to have no change in the grocery shopping habit are marginally higher.
- A good proportion of the respondents are keeping income expenditure balance in the family budget.
- Majority of the respondents preferred not to answer for the question regarding smoking habit and Alcohol consumption.
- Majority of the respondents found to have improved health and wellbeing as a result of lifestyle changes due to COVID-19.
- The Chi-Square test result shows the association between age and dietary habit of the individuals.

Conclusion

This study reveals that the six factors under consideration are remarkably influencing the lifestyle changes of the individuals in Thrissur district. Study found that there isn't much change in physical exercising, spiritual activities and sleeping. This may be explained by the increase in screen timing (57.1%). Most respondents (71.4%) reported that they have reduced their textile shopping. This may be as a result of restrictions for going out and gatherings as part of lockdowns, or because they are trying to maintain the balance of their income and expenditure. However, it is advisable to adopt healthy life style behaviors so as to improve the mental and physical health.

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