

IMPACT OF COVID-19 ON CHANGING LIFESTYLE PATTERN OF YOUNG ADULTS (AGED 20-40 YEARS)

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ABSTRACT

Coronavirus disease (COVID-19) is a communicable disease transmitted by SARS-CoV-2 virus. COVID-19 had a Global effect on the lifestyle of majority of people. They have become physically inactive and developed irregular eating patterns, which leads to unhealthier lifestyles and had also aggravated lifestyle-related disorders including cardiovascular diseases, obesity and many more; which in turn increased the severity of COVID-19. Various research studies have shown that COVID-19 has impacted the various lifestyle behaviors such as sleeping pattern and physical pattern. The present study will focus on identifying the impact of COVID 19 on various lifestyle related factors. The objectives of the study was to assess lifestyle changes affecting weight, sleep, mental health, physical activity, and dietary habits prospectively before COVID-19 and during lockdown. The study helped to find out the various factors which affect the quality of life of the defined age group. The study was confined to Delhi NCR region. The assessment was based on the data collected through questionnaire. The subjects selected for the study will be 200 young adults between age group of 20-40 years. The result was analyzed through paired t-test which showed that there exists a significant difference between lifestyle pattern of subjects before COVID-19 and during COVID-19. The study gave a brief insight about the various lifestyle factors which have affected the quality of life of the subjects during COVID-19 pandemic which will further help the population to change the unhealthy lifestyle practices adopted during COVID-19 to healthy lifestyle practices so that their quality of life will be enhanced.

Key words: COVID-19, Pandemic, Lockdown, Lifestyle changes, Young adults

INTRODUCTION

Coronavirus disease (COVID-19) is a communicable disease transmitted by SARS-CoV-2 virus [1]. The virus has mostly infected the individual's respiratory tract giving rise to symptoms like cold, cough, chest pain, etc. Other symptoms include loss of taste and smell. To reduce the further spread of the disease, various measures have been implemented across the globe. Nationwide confinement and self-isolation i.e. restriction of people in the home was one of the measures enforced by various countries. Along with these, various regional authorities have used media campaigns to make people aware about rising COVID cases, measures to prevent the spread of virus, etc. Regular hand washing, social distancing, use of masks, avoid going in crowded places were some of the measures. Due to the increase in rise of COVID-19 cases the need of precautionary tools like N-95 masks, PPE kit (personal protective equipment), ventilators, thermometers, oximeters, steamers have increased. When the world was going under the phase of lockdown and unlock down there were various lifestyle changes occurred among the individuals. These changes include a change in eating pattern, physical activity pattern, sleeping pattern, changing food choices and many more. Along with these changes mental health of the individual has also worsened leading to increasing stress levels in individual during COVID-19.

Since a healthy diet and lifestyle are important to support good health and well-being of the individual, various organizations such as World Health Organization (WHO) and European Federation of the Association of Dietitians offered various nutritional and lifestyle guidelines to be followed during COVID-19 lockdown. In some parts Mediterranean Diet was being adopted to promote healthy immune system. [2] Lifestyle plays a very important role in management and development of type 2 diabetes mellitus. The pandemic took long time to diminish and its lasting impact on lifestyle related behavior such as diet, physical activity, sleep pattern were significant. Hence, it becomes crucial to study the effect of COVID-19 on lifestyle related behaviors who are at a risk of developing Type 2 Diabetes Mellitus and the patients undergoing the treatment for the same. [3] The pandemic affected food systems as due to lockdown and trade restrictions farmers were not able to access the markets which disrupted food supply chains and the access to healthy, safe and diversified diet reduced. [4]

OBJECTIVES

- To study eating habits of selected subjects
- To find out the daily activity pattern of selected subjects
- To explore the sleeping pattern of selected subjects
- To find out and compare the factors affecting quality of life before and during COVID-19

MATERIALS AND METHODS

The locale used for the study was Delhi- NCR region. For the study 200 subjects were selected belonging to age group of 20-40 years including 100 males and 100 females. The subjects were selected randomly from different areas of Delhi NCR region. The purposive random sampling was used. A close ended questionnaire was used to collect data from subjects. The questionnaire consisted of questions from various aspects such as demographic information, eating habits, daily activities and sleeping pattern of the selected subjects. The study was conducted between January and April 2022. The subjects were collected from group of different occupation, lifestyle and economic status. After the collection of data from respondents, the data was analyzed using arithmetic mean and standard deviation and paired t-test to compare two variables i.e. before and during COVID-19.

RESULTS AND DISCUSSION

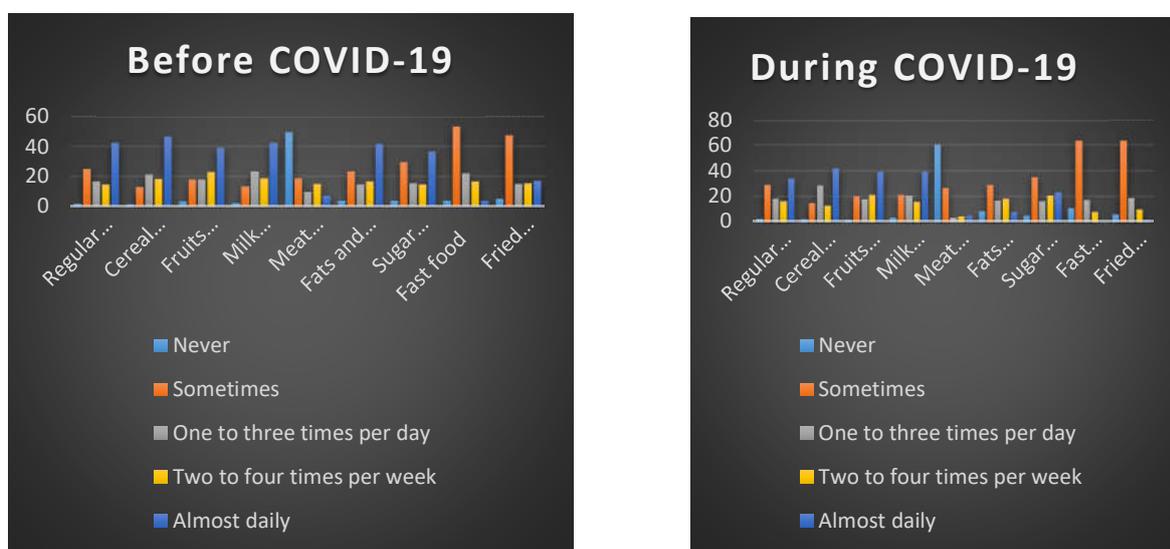
The following results were obtained from the study.

Fig.1 Sleeping pattern of selected subjects



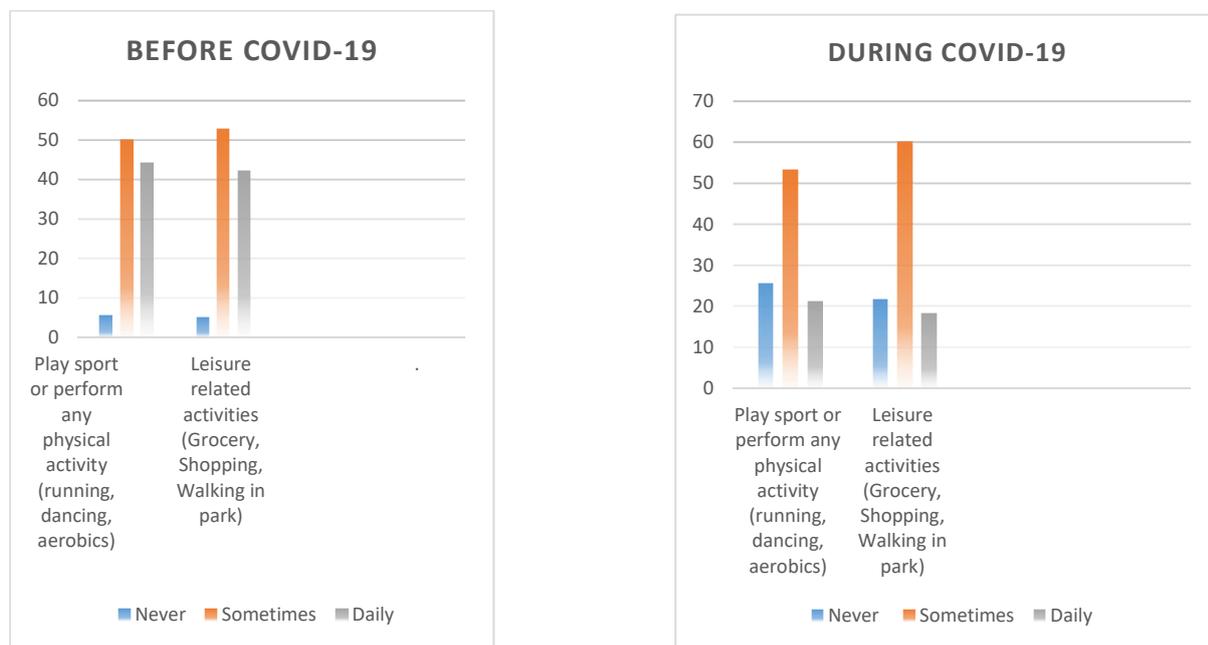
The above figure depicts the sleeping pattern of selected subjects before and during COVID-19. Before COVID-19 subjects experienced very good and sound sleep whereas during COVID-19 due to improper lifestyle and home confinement the sleep quality has decreased. The stress and anxiety level of subjects have also increased due to which they started taking medicines for the same.

Fig. 2 Dietary pattern of selected subjects



The above figure represents the dietary pattern of selected subjects before and during COVID-19. The maintenance of regular meal pattern has been reduced as people were in their homes so they have no proper scheduled meal timings. Due to the fact of increasing immunity during COVID-19 frequency of consumption of fruits and vegetables increased. As the people were confined to home and there was lockdown too, the consumption of fast and fried foods also declined.

Fig. 3 Physical activity pattern of selected subjects



The above figure depicts the physical activity pattern of the selected individuals. It can be observed from the figure that due to rising pandemic, fear of subjects of going out from home and closing of gyms the physical activity of subjects have declined. The subjects who were daily performing physical activities and doing leisure activities like shopping, walking in park, etc. were confined to home leading to a decrease in physical activity.

TABLE 1. PAIRED SAMPLE T-TEST

		t	Sig. (2-tailed)
Pair 1	Maintenance of Regular meal pattern before and during COVID-19	2.588	.010
Pair 2	Frequency of cereals and its products (wheat, rice, etc.) before and during COVID-19	2.491	.014
Pair 3	Frequency of fruits and vegetables before and during COVID-19	.190	.850
Pair 4	Frequency of milk and milk products before and during COVID-19	2.502	.013
Pair 5	Frequency of meat and meat products before and during COVID-19	5.804	.000
Pair 6	Frequency of fats and oils before and during COVID-19	5.564	.000
Pair 7	Frequency of sugar, honey or jaggery before and during COVID-10	4.552	.000
Pair 8	Consumption of fast foods (pizza, burger, noodles) as snacks or meals before and during COVID-19	5.843	.000
Pair 9	Consumption of fried foods (poori, bhujia, mathri,, etc.) before and during COVID-19	6.582	.000
Pair 10	Play sport or perform any physical activity (running, dancing, aerobics, etc. before and during COVID-19	7.171	.000
Pair 11	Did leisure related activities (grocery shopping, walking in park, etc. before and during COVID-19	6.577	.000
Pair 12	Sleeping pattern before and during COVID-19	4.762	.000
Pair 13	Stress or anxiety level before and during COVID-19	7.039	.000
Pair 14	Frequency of drinking alcohol before and during COVID-19	5.374	.000
Pair 15	Frequency of smoking before and during COVID-19	4.443	.000
Pair 16	Satisfaction with health before and during COVID-19	.867	.387
Pair 17	Quality of life before and during COVID-19	1.618	.008

Table 1 represents the statistical analysis of the data collected through questionnaires. Since in almost all cases the t-value is <0.05 , there exists a significant difference between dietary pattern, physical activity pattern, sleeping pattern and quality of life of subjects before COVID-19 and during COVID-19. In some cases the values were not significant i.e. there was no significant difference before and during pandemic such as intake of fruits and vegetables, health satisfaction of individual.

SUMMARY AND CONCLUSION

The present study was done to know the impact of COVID-19 on changing lifestyle pattern of young adults aged 20-40 years. COVID-19 proved to be very dangerous for the health and well-being of individual leading to various changes in their lifestyle pattern. The study was done by keeping in mind four objectives i.e. to explore dietary pattern, physical activity pattern and sleeping pattern of subjects belonging to defined age group and to find out various factors affecting their quality of life during pandemic. Subjects belonging to the age group of 20-40 years were randomly selected from Delhi-NCR region. It was observed that due to improper daily schedule, eating pattern and eating habits have changed such as regular meal pattern was not maintained, frequency of consumption of milk and milk products declined and many more. The frequency of consumption of fruits and vegetables increased during pandemic as people became aware that this food group will help them to boost immunity and prevent from infection. Due to lockdown and closure of dinings, restaurants and take- away consumption of fast foods like pizza, burger, etc. has declined. So the pandemic has led to improper eating habits of subjects. It has also been found that the pandemic led to decreased physical activity pattern as gyms were closed and people feared of going out of the homes. On the other hand earlier people were engaged in different types of physical and leisure activities like aerobics, grocery shopping, playing in parks, etc. Earlier subjects had very good sleep and were having very less stress and anxiety levels but the home confinement has led to poor sleep quality and an increased stress and anxiety level due to which subjects started taking pills. It has been observed that before pandemic subjects experienced very good quality of life while during COVID-19 subjects experienced poor quality of life as they were restricted to their homes and also they were not able to enjoy any kind of recreational activities. The major factors which led to poor quality of life were improper dietary pattern, decreased physical activity, poor sleeping pattern and high stress and anxiety levels.

Future Recommendations:-

- Authors can further expand this study by including the WHO-QOL questionnaire in this study to find out the various other factors which has affected the quality of life during COVID-19 pandemic.
- To know more precise results, the study can be done on the large scale for large population.

REFERENCES

1. Narayanan, L., Pandit, M., Basu, S., Karmakar, A., Bidhan, V., Kumar, H., & Brar, K. (2020). Impact of lockdown due to COVID-19 outbreak: lifestyle changes and public health concerns in India.
2. Galali, Y. (2021). The impact of COVID-19 confinement on the eating habits and lifestyle changes: A cross sectional study. *Food Science & Nutrition*, 9(4), 2105-2113.
3. Kumari, A., Ranjan, P., Vikram, N. K., Kaur, D., Sahu, A., Dwivedi, S. N., & Goel, A. (2020). A short questionnaire to assess changes in lifestyle-related behaviour during COVID 19 pandemic. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(6), 1697-1701.
4. <https://www.who.int/news/item/13-10-2020-impact-of-covid-19-on-people's-livelihoods-their-health-and-our-food-systems>