

Original Research Article

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Cross - Sectional Study on Assessment of Changes Adopted in the Lifestyle due to Covid 19 Situation

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ABSTRACT

Every individual or a group of individuals or a culture adopts some practices to make their life happy and comfortable. These practices can be in the form of living conditions, behaviours, interests, opinions, and habits that are typical of them or are chosen by them; and are termed as “lifestyle”. Lifestyle is a combination of determining intangible or tangible factors. Health, Nutrition and Physical activity are important components of a healthy lifestyle. The present generation surely did not anticipate about the global current emergency seen in the recent times i.e., COVID - 19 pandemic and they did not know how to keep their lifestyles intact in a positive manner due to the pandemic related situations or changes. As the people are not having any experience to deal with such emergency situations; most of them are trying to modify their lifestyles, knowing or unknowingly in order to survive in this time. These lifestyle modifications are sometimes creating an impact on their resource utilisation patterns (time, money etc.), product purchase patterns, daily routines, adjustment levels, mental health etc. Hence, this study was framed to identify and understand about the lifestyle modifications done by different individuals due to COVID- 19 situation and analyse the impacts on them, both positive and negative. The objectives of the study are: (1) To explore and compare the adjustments and changes done in the daily routines of the selected sample due to COVID-19 situation. (2) To study the changes done in their resource (time and money) utilisation patterns. (3) To examine their personal experiences and the impact on their lifestyle and resources available. The results of this study can be useful to various individuals and the society in having a preparedness about further emergencies. They also give an indication that the lifestyles are affected due to such emergencies both positively and negatively and these changes have to be tackled efficiently without harming the self, family and society. The aspects related to the physical health and mental health are not be ignored and people should be educated on how to deal with emergency situations smoothly without unnecessary changes in their lifestyles.

Keywords

Assessment,
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Situation

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Introduction

History says, that there are pandemics and epidemics repeating for every 100 years, which will affect the global population. Malaria, plague, tuberculosis, Ebolavirus attack, leprosy, influenza, smallpox are few examples.

Though there are some evidences regarding these occurrences, the population who have experienced these are very less among the ones who are alive now; and the present generation was not at all prepared to face the COVID- 19 pandemic situation initially.

Due to the contingency situation, people were forced to go into lockdown; and during the lockdown, they also had willingly or unwillingly changed their daily schedules, activities and lifestyles. Due to this, their behaviours and lifestyles were also modified and adapted according to the emergency situation.

Their resource (time and money mainly) management patterns and consumption patterns also changed due to various reasons. These are just few observations or changes in our personal lives or our neighbours, but may not be seen in everyone's lives.

Lifestyles and their changes are always different from one individual to another or one family to another. Earlier research studies focussed only on the lifestyle changes which are related to change in income level, technological developments etc. Research based evidence highlighting or showcasing the lifestyle changes caused to the COVID- 19 pandemic is very less, as this is a newly emerged situation in the recent times and the research related to this topic remains mostly untouched. Hence, the present study was conducted to assess the modifications seen in the lifestyles due to COVID- 19 situation.

Chopra *et al.*, (2020) conducted a cross sectional web - based survey on 995 individuals from India to study the impact of measures taken to contain COVID - 19 on lifestyle-related behaviour: eating, physical activity and sleep behaviour. The results showcased that there was an improvement in healthy meal consumption pattern and restriction of unhealthy food items was observed, mainly in the younger population (less than 30 years of age). A reduction in physical activity coupled with an increase in daily screen time was found especially among men and in upper socio-economic strata. Quarantine induced stress and anxiety showed an increase in nearly one-fourth of the participants.

Martinez *et al.*, (2021) conducted an online survey among the general population (n=1254 individuals) living in Spain during the COVID - 19 home - isolation. More number of participants testified substantial changes on outdoor time (94%) and physical activity (70%). About one third of subjects reported significant changes on stress management, social support, and peaceful sleep. Several demographic and clinical factors were associated to lifestyle scores. In the multivariate model, those independently associated with a healthier lifestyle included substantial changes on stress management ($p < 0.001$), social support ($p = 0.001$) and outdoor time ($p < 0.001$). In contrast, being an essential worker ($p = 0.001$), worse self-rated health ($p < 0.001$), a positive screening for depression/anxiety ($p < 0.001$), and substantial changes on diet/nutrition ($p < 0.001$) and sleep ($p < 0.001$) were all associated with poorer lifestyles.

Hu *et al.*, (2020) explored through an online survey about the perceived lifestyle changes after the outbreak of COVID-19 and their association with subjective well-being (SWB) among the general population (n = 1033) in

Mainland China. Results revealed that about 70 per cent of the respondents started spending more time looking at screens. About 30 per cent reported an increased frequency of vegetable and fruit intake after the outbreak. On the opposite side, participants who perceived a decrease in the frequency of vegetable, fruit, and breakfast intake more likely reported lower SWB.

Gigadocs (2020) reported that some of the lifestyle changes caused by the COVID-19 impact were following social distancing and isolation, work from home, using digital health tools and focusing on health and immunity by taking balanced meals, healthy diet, having adequate sleep, learning stress management, practising meditation and exercise and regular hand washing.

Di Renzo *et al.*, (2020) aimed to investigate the immediate impact of the COVID-19 pandemic on eating habits and lifestyle changes among the Italian population aged between 12 to 86 years (n= 3533). Information related to the demographic information (age, gender, place of residence, current employment); anthropometric data (reported weight and height); dietary habits information (adherence to the Mediterranean diet, daily intake of certain foods, food frequency, and number of meals/day); lifestyle habits information (grocery shopping, habit of smoking, sleep quality and physical activity) was collected. The results showed that the perception of weight gain was observed in 49 per cent of the respondents and 3 per cent of smoker respondents decided to quit smoking. A slight increased physical activity has been reported, especially for bodyweight training in 38.3 per cent of the respondents. The population group aged between 18 - 30 years resulted in having a higher loyalty to the Mediterranean diet when compared to the younger and the elderly population ($p < 0.001$ and $p < 0.001$, respectively).

Kapasia *et al.*, (2020) expressed that due to COVID - 19; a few problems like isolation, anxiety, instability, economic turmoil can greatly cause psychological distress among people. Increased anxiety, frustration, panic attacks, loss or sudden increase in appetite, insomnia and depression were reported during the lockdown period. People under aggressive self-isolation were more vulnerable to mental health issues experiencing trauma triggers an danger (Brooks *et al.*, 2020). Other factors such as indefinite isolation, social distancing, self-quarantine, cancelled travel plans and panicover scarce resources and information overload affected mental health adversely (Banerjee, 2020; Pfefferbaum and North, 2020).

Changes in lifestyle and daily habits due to lockdown were examined by Basu *et al.*, (2020) in India. They found that the survey population decreased the intake of fast food (60%) and meat products (34%) and also had lesser amounts than before. The consumption of fresh produce (44%) and dairy products (51%) remained the same and for around 36 per cent and 27 per cent participants, their consumption increased respectively. The number of meals taken in a day has increased for 24 per cent and decreased for 13 per cent. 44 per cent reported that their sleeping time before lockdown was majorly concentrated between 11pm – 1am, but this proportion decreased to 37 percent after lock down. A decrease (32% to 20%) was observed for those who slept between 9pm–11pm, whereas an increase (21% to 25%) was observed for those who slept between 1 am-3 am. A drastic increase (3% to 17%) was observed for those sleeping after 3 am. 59 per cent went out just 1 - 2 times per week to buy utilities; and 49 per cent respondents availed them through online mode. Activities like reading, doing household chores, listening to music, cooking, exercising, art, dancing were performed by the respondents (36% - 81%). Majority of them

indulged in these activities for 1-2 hours with exercising being the most performed activity for this duration. 74 per cent reported that their relationship with their family members improved during lockdown period.

Nair et al., (2020) found out in their study that among the lifestyle variables; sleep was stable, satisfactory or very satisfactory for 82 percent. Most of them had food in moderation (74%) during lock down, while some of them increased (18%) their consumption and others have decreased (8%). 59 percent did little or no exercise, while 40 per cent did moderate to good exercise. Body weight was reported to be increased in 31 per cent, while it remained unchanged in 55 percent and decreased only in 13 per cent. Internet use increased (67%) among the respondents and only 3 per cent reported decreased use. Alcohol consumption (83%) and smoking (59%) decreased during the post lockdown period; however, 23 per cent reported increased smoking. 57 per cent said that they had little or no stress, while only 39 per cent reported moderate to severe stress.

Anxiety (36%), sadness (7%), hopelessness and suicidality (2%) were felt by the population. An association was found between gender; and religiosity, exercise, fear of job loss and fear of ensuring future earnings. Women became more religious (69%) than men (31%), more women did not exercise than men (65% vs 35%), and the fear of job loss and ensuring future earnings was significantly more in men than in women.

Roy et al., (2020) conducted an online survey using a questionnaire on 1065 respondents from India who are in the age group of 13 to 25 years. The results based on the self - monitoring by the respondents showed that the mean sleep duration changed from 6.85 hours to 8.17 hours during the lockdown period, average screen time increased from 3.5 hours

to 5.12 hours. Around half of the respondents (52%) experienced higher stress levels and 76 per cent had more food intake and 39 per cent had decreased levels of physical activity.

They concluded that such changes can have long lasting effects on the physical, mental and social health of these young respondents and they have to follow some counteractive measures to lead a healthy lifestyle during the pandemic situation and beyond.

Materials and Methods

The present study was conducted using an exploratory research method. The data required for the study was collected by adopting a cross sectional approach from randomly selected respondents across the states of India i.e. Andhra Pradesh, Telangana and Karnataka from the South; Rajasthan, Gujarat and Maharashtra from the West; Punjab, Uttarakhand and Delhi from the North; Assam and Manipur from the East.

A structured questionnaire was used as a tool to collect the data pertaining to various aspects like the General information of the respondents, awareness about the COVID - 19 symptoms, product purchasing patterns, lifestyle changes, adjustments done, psychological feelings and problems faced due to COVID - 19 situation.

Due to social distancing regulations, the data was collected by online mode using Google forms which were sent to 250 sample. Around 220 respondents only have submitted the forms with completely filled - in information.

The data related to the 220 respondents was analysed by using descriptive statistics like frequencies and percentages. Inferential statistics like t - test and Analysis of Variance (ANOVA) were used to draw the inferences.

Results and Discussion

Results are presented under the following sub-headings:

Demographic profile of the respondents

Awareness taken among the respondents and responsibilities taken up regarding the COVID – 19 situation

Lifestyle changes/ adjustments done by the respondents due to COVID - 19 situation

Economic effects on the respondents due to COVID – 19 situation

Problems faced by the respondents in availing different products/ services during COVID - 19 lockdown

Personal experiences/ Observations of the respondents during COVID - 19 situation

Demographic profile of the respondents

The details related to the gender, age group, family type and occupational details of the respondents are displayed below.

The results displayed in the Figure 1 depicted that majority of the study respondents were females (59%). More percentage of the respondents were in the age group of 20 - 30 years (46%); followed by 31 - 40 years (16%), 41 - 50 years (15%) and soon, as seen in the Figure 2. Regarding the type of family, 71 per cent of the respondents' family type was nuclear, and the remaining 29 per cent respondents family type was a nuclear family with adhesions and/ or adjuncts (5 or more than 5 members), as seen in the Figure 3.

Results in the Table 1 displayed that majority of the respondents were students (39%), private company/ institution employees (22%)

and state government employees, working on regular mode (16%). The results also showed that the respondents belonged to a wide range of occupations. Majority (46%) of the respondents were either unemployed/homemakers/students, hence they were not considered under any sector which provides employment. Among the respondents who were employed, majority (25%) were working in the education/ training sector, followed by Information Technology(6%), Healthcare (3%), Communication(2%) and Banking (1%) sectors.

More than half of the respondents (59%) were having an option to work from home, even before the COVID-19 situation raised up. Only 10 per cent respondents were given this option after the COVID - 19 situation started. The remaining 30 percent were either unemployed or have not given the option. As majority of the respondents were either from education/ training[mostly students] (25%) and information technology sectors (6%), they mostly had option of working from home; in Pre – COVID 19 times also. Around 24 per cent do not have the work from home option even in this COVID- 19 period as this may be due to the nature of their job, which cannot be done in the home.

Awareness taken among the respondents and responsibilities taken up regarding the COVID – 19 situation

This sub – section highlights the results related to the respondents awareness related to the symptoms, measures and precautions to be taken related to Coronavirus protection; perception towards the measures taken up by the government; respondents anticipation towards the emergency situations and hoarding of food products and basic necessities; and responsibilities taken up during these tough situations. It is good to find that a great number of respondents were aware

about the symptoms of COVID - 19 in human beings (96%) along with the measures and precautions to be taken if they or their family member or anyone develop the symptoms of COVID - 19 (94%), as seen in the Figure 4. The remaining respondents do not know about the symptoms and precautions to be taken. This may be due to various reasons like bombarded information regarding COVID - 19 pandemic from various reliable and unreliable sources; as this situation was never known or faced by them earlier; lack of proper scientific evidences or medicines available or due to some psychological beliefs as they feel that no one knows the correct information regarding COVID - 19 as this is a situation which the present world never heard or experienced.

Around 89 per cent felt that the government is taking necessary measures against the COVID - 19 pandemic. This may be due to the measures taken up like the nation - wide lockdown, awareness campaigns, strict rules like using masks, maintaining social distance, sanitizers for better sanitation and hygiene, constructing new or modification of old medical facility buildings, provision of healthcare facilities required etc. Another reason might be that even in a country like India which is densely populated; the ratio of the population to the COVID - 19 affected population is less. The remaining 11 per cent did not feel the same. This may be due to the statistics which are showing an increase in the number of cases even after numerous measures being taken up.

For most of the people all over the world, the COVID - 19 pandemic and related situations are like a sudden emergency. Hence, people were not ready and did not anticipate the consequences of circumstances. The present study results also supported that only 0.5 per cent i.e. highly negligible per cent of the respondents anticipated the emergency due to

the onset of pandemic in other countries and purchased basic necessities and food products, very well in advance i.e., in January 2020. About 40 per cent purchased a little well in advance, between 1st – 20th March 2020. Around 32 per cent respondents purchased things only after the lockdown was announced on 21st March, 2020. This showed that majority of the respondents were not really aware and prepared for the COVID - 19 emergency situations. Around 28 per cent did not hoard any products unnecessarily as the products were available in the market daily, as per the Government regulations (Table 2).

From the results seen in the Table 3 it can be noticed that majority of the respondents that i.e., more than 75 per cent were being responsible as a citizen, during the COVID - 19 situation. They were trying to maintain social distance and practice self - isolation; got awareness regarding the latest happenings and educating others; taking care of the sanitation and hygiene needs. Few of them tried to help the needy people and animals and also pass on this information to other people. It can be noticed that only some percentage of the respondents informed the government officials/ media about the marketing frauds (28%) and about the suspicious COVID - 19 cases found (27%). Not informing the Government/ Media regarding the marketing frauds can cause some adverse health effects and also money losses to other people. Apart from this, not informing the Government/ Media regarding the suspicious cases found can also be a loss and threat to the surrounding people as they might get infected with the virus, if they get in contact with the suspicious cases unknowingly.

Lifestyle changes/ adjustments done by the respondents due to COVID - 19 situation

This sub - section highlights the results related to the Lifestyle changes/ adjustments done by

the respondents due to COVID - 19 situation like time spent on different activities in the Pre -COVID times and during COVID - 19 times, activities initiated and whether there is an increase/ decrease of time spent in different activities due to COVID - 19 situation; and changes in daily routine, wake - up timings and meal patterns due to the emergency situation etc.

The respondents were asked about the lifestyle changes/ adjustments done due to the COVID - 19 situation. Table 4 reveals the results related to the changes in the time spent on different activities. Majority of the respondents expressed that the time spent by them increased on the following activities: time spent with the family (91%), performing household activities (78%), sleeping (76%), continuous usage of internet unknowingly (70%), learning new things (68%) and binge watching Television/ movies (64%). It can be inferred that as the respondents used to go for their work/ job earlier, they didn't have time to do the above mentioned things. During COVID – 19 period; as most of the respondents were not going to work and staying back at home; their time on learning new things, spending time with family, doing house hold activities, sleeping and internet usage increased.

On the other hand, spending time with friends/ relatives decreased (55%); due to the movement restrictions during the lockdown period. This was followed by continuous usage of electronic gadgets unknowingly (30%) which might be due to the availability of more time with family, sleeping and learning new things etc. The time spent on working on hobbies also decreased as said by 29 per cent; and this might be due to the lack of time as they spend more time with family, doing household activities etc. Time spent on doing exercise/ yoga/ meditation also decreased as expressed by 29 per cent, and

this might be due to the change in the routine schedule, closure of gyms/ fitness centres and lack of motivation to do workouts in home and lack of time after doing all other household activities.

The results displayed in the Table 5 showed that majority of the respondents brought changes in time spent on various activities like watching television/movies (81%); household (80%) and work related activities (72%), their sleeping (74%) and food eating habits/ patterns (75%); usage of electronic gadgets (76%) and practicing hobbies (60%) during the COVID - 19 emergency period. This can be attributed to the deviation from their regular schedule during Pre - COVID times. Earlier, the respondents who were home makers or the respondents who went out for work had a proper timetable, and hence the daily activities were done in an order. Now, during the lockdown period; as all the respondents and their family members were staying at home without paid help; alterations in the activities and timetable were done based on their feasibility.

During the lock down period, restrictions regarding the shop timings were imposed by the Government. Hence, it was necessary for the people to buy things in the specified timings only. Due to this, the wake up timings in the morning were altered for some of the people.

The results related to the changes done regarding the wake up timings in the mornings showed that in Pre - COVID times around 30 per cent of the respondents woke up before 6 am; and during COVID - 19 times, only half of them woke up before 6 am. Even the number of respondents who woke up between 6 am – 7 am also decreased in the COVID - 19 times (35% to 24%), when compared to the Pre - COVID times (35%). This might be due to the lack of compulsion for maintaining the

daily schedule properly; no requirement to go out for office/ work; and no time restrictions for the women/ home makers to prepare breakfast and lunch at fixed times for their children and husband.

The number of respondents (22%) who wake up between 7 am - 8 am in Pre - COVID 19 times and during COVID - 19 times remained the same; and this might be the ideal time for the respondents. It can be noticed that the respondents who woke up late (after 8 am) increased from 3 per cent to 27 per cent during the COVID - 19 times, compared to the Pre - COVID times. The same reasons mentioned in the above paragraph can be attributed for this change too (Figure 5).

Everyday has a routine in their daily life. Due to the some emergency situations, there may be some changes in the routine. COVID - 19 is also one such emergency situation which was not anticipated by the people. In this study, the respondents were asked about the changes done and practices adopted in their routine due to COVID - 19 situation. The results displayed in the Table 6 showed that more than half of the respondents spent more time on household work (74%); changed their sleeping patterns (69%) and meal patterns (59%) in terms of their timings and number; and also did official work at home (51%). Around 38 per cent also expressed of not getting enough time for socialization and feeling stressed (29%) and this is due to the increased workload caused by being at home and working continuously on household and professional related activities.

Regarding the practices adopted due to the COVID - 19 situation, it was found that more than 80 per cent of the respondents started having more focus on their personal hygiene and learning to deal with the present situation. On the other side, 42 per cent expressed about managing their time efficiently. About 77 per

cent watched TV/ Mobiles for COVID - 19 updates while 54 per cent watched TV for passing away the time. 68 per cent have used personal protective equipment like nose masks, face masks, gloves etc. to protect themselves from Corona virus attack. Sanitising food items was done by 72 per cent as a preventive measure (Table 6).

From the Table 7, it can be noticed that due to the lifestyle changes and adjustments done during the COVID - 19 times, there are some changes done by the respondents in the time spent on different activities (per day). In pre - COVID 19 times, most of the respondents (41%) used to spend time with their family for around 1 - 2 hours per day and during COVID - 19 times they spent time for more than 4 hours (63%).

Exercise, cooking, cleaning and washing clothes were done for 1 - 2 hours per day, during the Pre - COVID times and also in the COVID - 19 times by majority of the respondents. It can also be seen that the number of respondents who did not cook or clean utensils, mopping, wash clothes in the pre - COVID times (39%) was reduced to 25 per cent during COVID - 19 times.

This showed that due to lack of maid services in the lockdown period, respondents were trying to do household work on their own. The number of people who exercised during COVID - 19 decreased when compared to the pre - COVID situation which might be due to the increased workload and lack of time to exercise.

Even hobbies like Painting, Music, Gardening etc. were practised for 1 - 2 hours per day by majority of the respondents in Pre -COVID times and also in COVID-19 times. About 49 per cent of the respondents were indulged in pursuing their hobbies in the pre - COVID times and was raised to 69 per cent which

means that the respondents were having time and practising hobbies in the COVID - 19 times.

During Pre -COVID and also in COVID-19 times, more number of the respondents spent more than 4 hours to do office/ professional work.

Majority of the respondents spent 1 - 2 hours for recreational activities like playing indoor/ outdoor games, Watching movies/Television etc. in pre - COVID and COVID - 19 times. But the number of respondents who spent time on recreational activities for more than 3 hours increased tremendously in the COVID - 19 times. This showed that the respondents started playing indoor games, watching television and movies more during COVID - 19 period.

The number of respondents who used mobiles/ laptops (excluding official work/ study) for more than 4 hours per day increased tremendously(almost double) during COVID-19 times. The number of respondents who slept for more than two hours (per day) during day time increased in COVID - 19 times.

Overall the results showed that the time spent with family and using mobile/laptops (excluding official work/ study) was increased during the COVID - 19 times for most of the respondents. The time spent for exercise; cooking; cleaning (utensils, moping, setting up the rooms, dusting furniture etc.); washing clothes/ laundry activities; practising hobbies (painting, music, gardening etc.); office/ professional work; recreation (playing indoor/ outdoor games, watching movies/ television etc.), sleep during the day, indulgence in religious activities was also increased during COVID - 19 times (Table 7).

The statistical analysis results displayed in the Table 8 revealed that age, gender and

occupational status showed no significant differences in activities initiated during COVID - 19 situation, except for family size which showed significant difference in activities initiated at 0.05 level of significance.

The results displayed in the Table 9 showed that majority of the respondents (48%) purchased food items only once in a week. Only few respondents (1%) purchased the food items daily. This is due to the self - care taken by the respondents and also the sense of being responsible of not going out unnecessarily and frequently in the COVID - 19 pandemic emergency times.

Almost 90 per cent of the respondents went to the stores personally and purchased the required household essentials. The highest number of respondents (34%) stocked the food items or other necessities required for about a week, followed by 1 - 3 days (19%) and 15 days (19%). Only 11 per cent purchased the items for more than a month. As the food items or other necessities were available to the respondents despite lockdown without much difficulty, the respondents did not stock them unnecessarily.

The results displayed in the Table 10 showed that more than 60 per cent of the respondents had three meals a day i.e., breakfast (60%), lunch (65%) and dinner (67%); during the COVID - 19 times. Around 41 per cent of the respondents had brunch and 55 per cent had some evening snack too. A lesser percentage of the respondents (24%) had late night meals.

More number of the respondents expressed that the number of items prepared per meal increased for lunch (36%) and evening snack (38%). As more number of the respondents woke up late in the morning times, they did not prepare more number of items during breakfast; even though eating a healthy and stomach full breakfast is a good practice. This

was supported by the other results too as more number of respondents (21%) expressed of decreasing the number of items prepared during the breakfast.

Economic effects on the respondents due to COVID – 19 situation

Results related to the economic effects on the respondents due to COVID - 19 situation are depicted in this sub - section. The changes in the income earned and expenditure patterns were analysed.

There are many changes seen in the economy of an individual/ a family/ for the country; due to the adverse effects caused by the COVID - 19 pandemic and the lockdown. For some people the income increased, and for some it decreased and for some there was no income at all. Some of them might have increased their savings and some of them might have used them. So, such different situations and changes in the money usage patterns were also observed.

The results in the Table 11 showed that more than half of the respondents' income (54%) remained the same, even after the COVID - 19 situation. Around 41 per cent expressed of decreased income, as this is due to the presence of businesspersons and contractual employees among the respondents and some of the respondents working in the Government sector received only half amount of their monthly salary. Only 5 per cent of the respondents received an increased income, and this might be due to the incentives that an employer is providing them for working even in this COVID - 19 situation.

Expenditure related to the food prepared at home increased (76%); followed by communication (40%), house maintenance (34%), health/ medical (23%), recreation (22%) and education (20%) during COVID -

19 situation. Communication costs increased due to the increased usage of mobile phones or laptops for communication with friends/ relatives/ family with whom they are unable to meet due to the lockdown. House maintenance expenditures increased due to the continuous precautions being taken regarding the sanitation and hygiene. Expenditure costs on recreation increased due to the usage and subscriptions of various applications like Amazon prime video, Zee5, Hotstar etc., which have lot of movies and series to be watched. Education costs increased due to attending many webinars, online courses etc by the respondents as they have got some free time to develop their professional merits. Very few respondents expressed that the expenditure increased for clothing (4%), food purchased from outside (1%) and transportation costs (8%).

The expenditure was decreased for food purchased from outside (79%), clothing (64%) and recreation (59%) as restaurants, shopping malls, textile showrooms, movie theatres and places like parks, gardens were closed.

Transportation costs also decreased for majority of respondents (67%) as the public and private travel services were not being run in the lockdown as like the pre - COVID times; and commuting to go to work was not there as people were working from home.

The expenditure on housing rent remained constant for more respondents (86%). Though Government is insisting the owners not to collect the house rent, majority of the owners were collecting the rent and hence this expenditure remained constant.

The statistical analysis results displayed in the Table 12 reveals that age, gender, family size and occupational status showed no significant differences in expenditure incurred due to COVID - 19 situation.

Problems faced by the respondents in availing different products/ services during COVID - 19 lockdown

Due to the lockdown restrictions put by the Government, people faced difficulties in availing certain products/ services. The results related to this aspect (displayed in Table 13) showed that more than 60 per cent of the respondents faced problems in getting services like online product delivery; house maids; restaurants/ other eateries, tailoring/ plumbers/ electricians/ mechanics/ other service providers; public transport, shopping malls, cabs and car drivers. From this it can be inferred that during the lockdown period availing services was more difficult for the respondents, when compared to the availing of products/ goods.

ANOVA for demographic wise differences in problems faced in availing products/ services due to COVID – 19 situation reveals that age and occupational status showed no significant differences but gender showed significant differences in problems faced at 0.01 level of significance and family size showed significant differences at 0.05 level of significance (Table 14).

Personal experiences/ Observations of the respondents during COVID - 19 situation

The results related to the personal experiences/ observations of the respondents with relation to the COVID - 19 situation are depicted in the sub - section.

The personal experiences/ observations of the respondents during COVID - 19 situation were asked. Majority of the respondents (51%) felt that their daily work increased; whereas 25per cent felt it decreased and the remaining 24per cent felt that their daily work did not change (Table 15). More than half of the respondents

(57%) faced high level of difficulty in the purchase of products/ services. Around 31 per cent respondents faced medium level difficulty and the remaining 11per cent faced low level of difficulty in purchasing products/ services. Regarding the changes in the product prices, 67per cent of the respondents felt that the prices increased; whereas 30 per cent felt there was no change and the remaining 2per cent felt that product prices decreased.

It is good to notice that majority of the respondents (58%) did not find any changes in their mental health due to the COVID - 19 situation. The remaining respondents experienced few negative or positive changes in their mental health. Around 20 - 30 per cent of the respondents suffered from the feeling of unhappiness, stress and sleeplessness/ insomnia. Around 13 - 16 per cent suffered from unnecessary anger, depression and anxiety due to the COVID - 19 situation and the implications happening around. Negligible per cent faced problems like suicidal tendencies, loneliness, fear, ideal thinking etc. Positive change like increased happiness was experienced by around 2 per cent of the respondents.

Regarding the changes in the physical health, more number of the respondents (19% - 45%) faced positive changes like healthy skin, hair and nails; lesser body aches; better menstrual health etc., during the COVID - 19 times. The respondents started practising exercise/ yoga/ meditation during the COVID - 19 lockdown period and this might be one of the reasons contributing for the positive changes in the physical health. Lack of mental pressure or work stress also can be the additional factors. On the other hand, around 0.5 - 0.9 per cent of the respondents faced unhealthy changes in their physical health like weight gain, physical stress and increased body aches due to the heavy workload.

Table.1 Occupational details of the respondents

(n = 220)

Sl. No.	Classification	F	%
A. Occupation			
1.	Student	86	39.1
2.	Private company/ institution employee	48	21.8
3.	State Government employee (Regular)	36	16.4
4.	Unemployed	15	6.8
5.	Self - employed / Business	13	5.9
6.	Central Government employee (Regular)	9	4.1
7.	State Government employee (Contract/ Outsourcing)	6	2.7
8.	Central Government employee (Contract/ Outsourcing)	4	1.8
9.	Any other	3	1.4
B. Sector of employment			
1.	Unemployed/ Student/ Home maker	102	46.4
2.	Education/ Training	56	25.5
3.	Information Technology	14	6.4
4.	Healthcare	7	3.2
5.	Communication	4	1.8
6.	Banking	3	1.4
7.	Research and Development	2	0.9
8.	Garments/ Textiles/ Handlooms	2	0.9
9.	Consumer / Essential goods	2	0.9
10.	Insurance and Real estate	2	0.9
11.	Service industry	2	0.9
12.	Media, Fitness, Accounts, Exports, Engineering, Women and Child Welfare, Construction, Taxation, Defence, Municipality, Jewellery, Atomic energy, and Tribal development	1	0.5
		Per each sector	Per each sector
13.	Others	11	5
C. Availability of work from home option			
1.	Yes	131	59.5
2.	No	52	23.6
3.	Yes, only due to the COVID- 19 emergency situation	22	10
4.	Unemployed	15	6.8

Table.2 Awareness of the respondents regarding COVID – 19

(n = 220)

Sl. No.	Awareness criteria	F	%
1.	Hoarded the food products and basic necessities by anticipating the emergency situations		
(a)	In January 2020	1	0.5
(b)	In February 2020	-	-
(c)	Between 1 st – 10 th March 2020	16	7.3
(d)	Between 11 th – 20 th March 2020	72	32.7
(e)	Only after the lockdown period was announced on March 21 st 2020	70	31.8
(f)	Not hoarding the products unnecessarily as the products are available in the market daily	61	27.7

Table.3 Responsibilities taken up by the respondents during the COVID – 19 situation
(n = 220)

Sl. No.	Activity done	F	%
1.	Following Government instructions	207	94.1
2.	Following social distancing	200	90.9
3.	Maintaining personal hygiene	194	88.2
4.	Taking care of the family hygiene needs	187	85
5.	Educating yourself about the latest happenings	185	84.1
6.	Maintaining the house and surroundings hygienically	182	82.7
7.	Not spreading false and unnecessary information personally or through social media	181	82.3
8.	Trying to know about the real facts about the situation	180	81.8
9.	Self - isolation for the benefit of self and community	179	81.4
10.	Educating family/ other people/ neighbours/ relatives/ friends about the current situation in whatever way you can	167	75.9
11.	Informing about the needs of the needy people and animals to the persons who can offer help	87	39.5
12.	Informing government officials/ media about the marketing frauds	62	28.2
13.	Informing government officials/ media in case of suspicious COVID - 19 cases found	59	26.8
14.	Trying to help for the needy through a small friends' group	1	0.5
15.	Sending daily advisories to the farmers and other groups via whats app group	1	0.5

(Multiple responses were recorded, and hence the percentage exceeds 100)

Table.4 Lifestyle changes/ adjustments done by the respondents due to COVID - 19 situation
(n = 220)

Sl. No.	Activity	Time spent		
		Increased F (%)	Decreased F (%)	Do not engage in this activity F (%)
1.	Spending time with family	201 (91.4)	15 (6.8)	4 (1.8)
2.	Spending time with friends/ relatives	49 (22.3)	122 (55.5)	49 (22.3)
3.	Praying/ Religious activities	102 (46.4)	65 (29.5)	53 (24.1)
4.	Sleeping	167 (75.9)	49 (22.3)	4 (1.8)
5.	Exercise / Yoga / Meditation	119 (54.1)	65 (29.5)	36 (16.4)
6.	Cooking	145 (65.9)	39 (17.7)	36 (16.4)
7.	Household activities	172 (78.2)	32 (14.5)	16 (7.3)
8.	Learning new things	149 (67.7)	55 (25)	16 (7.3)
9.	Working on hobbies	132 (60)	64 (29.1)	24 (10.9)
10.	Binge watching Television / movies	141 (64.1)	65 (29.5)	14 (6.4)
11.	Continuous usage of internet unknowingly	155 (70.5)	54 (24.5)	11 (5)
12.	Continuous usage of electronic gadgets unknowingly	123 (55.9)	66 (30)	31 (14.1)

(Multiple responses were recorded, and hence the percentage exceeds 100)

Table.5 Changes done by the respondents related to different activities due to COVID - 19 situation

(n = 220)

Sl. No.	Activities	Yes F (%)	No F (%)
1.	Sleeping pattern	164 (74.5)	56 (25.5)
2.	Food eating habits/ pattern	165 (75)	55 (25)
3.	Using electronic gadgets	167 (75.9)	53 (24.1)
4.	Watching Television / movies	177 (80.5)	43 (19.5)
5.	Practicing Hobbies	132 (60)	88 (40)
6.	Work related	159 (72.3)	61 (27.7)
7.	Household activities	175 (79.5)	45 (20.5)

Table.6 Changes done in the respondents' routine and practices adopted due to COVID - 19 situation

(n = 220)

Sl. No.	Activity	F	%
A.	Changes done in the routine		
1.	Spending more time on household work	164	74.5
2.	Sleep timings and no. of sleeping hours per day	153	69.5
3.	Meal timings, number and quantities	129	58.6
4.	Doing official work at home	113	51.4
5.	Learning new skills (cooking/ painting etc)	108	49.1
6.	Practising hobbies/ interests (singing, craft work etc)	107	48.6
7.	Including exercise in the daily routine	93	42.3
8.	Not getting enough time for socialization	84	38.2
9.	Feeling stressed due to increased workload	63	28.6
B.	Practices adopted		
1.	More focus on Personal hygiene (washing hands frequently using soaps, sanitisers etc)	191	86.8
2.	Learning to deal with the present situation responsibly	183	83.2
3.	Watching TV/ Mobile for COVID - 19 updates	169	76.8
4.	Sanitising food items purchased	158	71.8
5.	Using personal protective equipment like nose masks, face masks, gloves etc.	149	67.7
6.	Watching TV/ Mobile for passing away the time	120	54.5
7.	Managing time efficiently	93	42.3

(Multiple responses were recorded, and hence the percentage exceeds 100)

Table.7 Comparison of the time spent by the respondents for different activities (per day)
(n = 220)

Sl. No.	Activity / Time (per day)	Pre - COVID 19 times F (%)	During COVID - 19 times F (%)
A. Time spent with family			
1.	No time to spend with the family	7 (3.2)	2 (0.9)
2.	1 - 2 hours	90 (40.9)	18 (8.2)
3.	3 - 4 hours	46 (20.9)	40 (18.2)
4.	More than 4 hours	41 (18.6)	139 (63.2)
5.	Do not spend time with family	36 (16.4)	21 (9.5)
B. Exercise			
1.	No time for exercise	35 (15.9)	20 (9.1)
2.	1 - 2 hours	99 (45)	130 (59.1)
3.	3 - 4 hours	7 (3.2)	9 (4.1)
4.	More than 4 hours	3 (1.4)	2 (0.9)
5.	Do not exercise	76 (34.5)	59 (26.8)
C. Cooking			
1.	No time to cook	28 (12.7)	9 (4.1)
2.	1 - 2 hours	92 (41.8)	99 (45)
3.	3 - 4 hours	13 (5.9)	45 (20.5)
4.	More than 4 hours	2 (0.9)	13 (5.9)
5.	Do not cook	85 (38.6)	54 (24.5)
D. Cleaning (Utensils, Moping, Setting up the rooms,Dusting furniture etc.)			
1.	No time for these activities	25 (11.4)	9 (4.1)
2.	1 - 2 hours	101 (45.9)	119 (54.1)
3.	3 - 4 hours	9 (4.1)	33 (15)
4.	More than 4 hours	1 (0.5)	5 (2.3)
5.	Do not clean	84 (38.2)	54 (24.5)
E. Washing clothes/ Laundry activities			
1.	No time for these activities	22 (10)	16 (7.3)
2.	1 - 2 hours	91 (41.4)	110 (50)
3.	3 - 4 hours	1 (0.5)	10 (4.5)
4.	More than 4 hours	1 (0.5)	3 (1.4)
5.	Do not wash	105 (47.7)	81(36.8)
F. Practising Hobbies (Painting, Music, Gardening etc.)			
1.	No time for such activities	43 (19.5)	28 (12.7)
2.	1 - 2 hours	88 (40)	104 (47.3)
3.	3 - 4 hours	13(5.9)	32 (14.5)
4.	More than 4 hours	7 (3.2)	14 (6.4)
5.	Do not do these activities	69 (31.4)	42 (19.1)
G. Office/ Professional work			
1.	No time for this activity	17 (7.7)	25 (11.4)

2.	1 – 2 hours	30 (13.6)	45 (20.5)
3.	3 – 4 hours	40 (18.2)	51 (23.2)
4.	More than 4 hours	92 (41.8)	55 (25)
5.	Do not do this activity	41 (18.6)	44 (20)
H.	Recreation (Playing indoor/ outdoor games, Watching movies/ Television etc.)		
1.	No time to do such activities	44 (20)	22 (10)
2.	1 – 2 hours	73 (33.2)	66 (30)
3.	3 – 4 hours	31 (14.1)	54 (24.5)
4.	More than 4 hours	16 (7.3)	46 (20.9)
5.	Do not do this activity	56 (25.5)	32 (14.5)
I.	Using mobile/ laptops (excluding official work/ study)		
1.	No time to use them	6 (2.7)	3 (1.4)
2.	1 - 2 hours	96 (43.6)	74 (33.6)
3.	3 - 4 hours	50 (22.7)	50 (22.7)
4.	More than 4 hours	33 (15)	69 (31.4)
5.	Do not use them for other purposes, except official work	35 (15.9)	24 (10.9)
J.	Educational work (Writing assignments/ thesis/ projects, article reading etc.)		
1.	No time to do these activities	29 (13.2)	24 (10.9)
2.	1 – 2 hours	53 (24.1)	57 (25.9)
3.	3 – 4 hours	42 (19.1)	50 (22.7)
4.	More than 4 hours	44 (20)	35 (15.9)
5.	Do not have this work	52 (23.6)	54 (24.5)
K.	Religious activities		
1.	No time to perform religious activities	31 (14.1)	24 (10.9)
2.	1 - 2 hours	80 (36.4)	89 (40.5)
3.	3 - 4 hours	13 (5.9)	22 (10)
4.	More than 4 hours	1 (0.5)	4 (1.8)
5.	Do not do these activities	95 (43.2)	81 (36.8)
L.	Sleep during the day		
1.	No time to sleep	39 (17.7)	21 (9.5)
2.	1 - 2 hours	53 (24.1)	68 (30.9)
3.	3 - 4 hours	10 (4.5)	34 (15.5)
4.	More than 4 hours	26 (11.8)	43 (19.5)
5.	Do not sleep	92 (41.8)	54 (24.5)

Table.8 ANOVA for demographic wise differences in activities initiated during COVID - 19 situation

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	4.310	19	.227	.899	.585
	Within Groups	49.969	198	.252		
	Total	54.280	217			
Gender	Between Groups	41.178	19	2.167	1.423	.119
	Within Groups	301.615	198	1.523		
	Total	342.794	217			
Family size	Between Groups	32.306	19	1.700	1.622	.05*
	Within Groups	207.529	198	1.048		
	Total	239.835	217			
Occupation	Between Groups	55.446	19	2.918	.406	.988
	Within Groups	1424.683	198	7.195		
	Total	1480.128	217			

Table.9 Comparison of purchase practices of the respondents regarding the daily household essentials

(n = 220)

Sl. No.	Frequency	During COVID - 19 times F (%)
A.	Purchasing food items	
1.	Daily	3 (1.4)
2.	Once in 2 days	19 (8.6)
3.	Once in 3 - 4 days	74 (33.6)
4.	Once in a week	105 (47.7)
5.	Other person in the house gets the items	18 (8.2)
6.	Maid/ other helpers bring the items	1 (0.5)
B.	Mode of purchase	
1.	Online purchase	21 (9.5)
2.	Personally, going to the stores	199 (90.5)
C.	Stocking food items or other necessities	
1.	1 - 3 days	41 (18.6)
2.	7 days	75 (34.1)
3.	15 days	41 (18.6)
4.	1 month	39 (17.7)
5.	More than a month	24 (10.9)

Table.10 Comparison of the changes in the meal patterns of the respondents
(n = 220)

Sl. No.	Meals (per day)	During COVID - 19 times F (%)		
A.	Meals taken			
1.	Breakfast	132 (60)		
2.	Brunch	91 (41.4)		
3.	Lunch	143 (65)		
4.	Evening snack	122 (55.5)		
5.	Dinner	148 (67.3)		
6.	Late night meals	53 (24.1)		
B.	No. of items prepared per meal	Increased F (%)	Decreased F (%)	No change F (%)
1.	Breakfast	53 (24.1)	47 (21.4)	120 (54.5)
2.	Brunch	48 (21.8)	31 (14.1)	141 (64.1)
3.	Lunch	80 (36.4)	26 (11.8)	114 (51.8)
4.	Evening snack	84 (38.2)	38 (17.3)	98 (44.5)
5.	Dinner	60 (27.3)	34 (15.5)	126 (57.3)
6.	Late night meals	27 (12.3)	31 (14.1)	162 (73.6)

Table.11 Economic effects on the respondents due to COVID – 19 situation
(n = 220)

Sl. No.	Issues	Increased F (%)	Decreased F (%)	Remains constant F (%)
A.	Income	11 (5)	91 (41.4)	118 (53.6)
B.	Expenditure			
1.	Recreation (Movies, Visiting parks etc.)	49 (22.3)	131 (59.5)	40 (18.2)
2.	Clothing	9 (4.1)	141 (64.1)	70 (31.8)
3.	Health/ Medical	50 (22.7)	59 (26.8)	111 (50.5)
4.	Food prepared at home	168 (76.4)	7 (3.2)	45 (20.5)
5.	Food purchased from outside (restaurant / online)	2 (0.9)	173 (78.6)	45 (20.5)
6.	Housing (Rent)	11 (5)	29 (9.1)	189 (85.9)
7.	House maintenance	75 (34.1)	20 (9.1)	125 (56.8)
8.	Transportation costs	18 (8.2)	147 (66.8)	55(25)
9.	Communication	88 (40)	64 (29.1)	68 (30.9)
10.	Education	44 (20)	86 (39.1)	90 (40.09)
C.	Savings	84 (38.2)	64 (29.1)	72 (32.7)
D.	Banks (Moratorium facility)	26 (11.8)	49 (22.3)	145 (65.9)
E.	Travel (joy trips/ rides etc.)	4 (1.8)	176 (80)	40 (18.2)
F.	Socialisation (parties)	12 (5.5)	194 (88.2)	14 (6.4)

Table.12 ANOVA for demographic wise differences in expenditure incurred due to COVID - 19 situation

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	5.026	24	.209	.824	.704
	Within Groups	49.569	195	.254		
	Total	54.595	219			
Gender	Between Groups	37.477	24	1.562	.980	.494
	Within Groups	310.610	195	1.593		
	Total	348.086	219			
Family Size	Between Groups	24.454	24	1.019	.889	.617
	Within Groups	223.528	195	1.146		
	Total	247.982	219			
Occupation	Between Groups	184.496	24	7.687	1.153	.290
	Within Groups	1299.849	195	6.666		
	Total	1484.345	219			

Table.13 Problems faced by the respondents in availing different products/ services during COVID – 19 lockdown

(n = 220)

Sl. No.	Product/ Service	Problem faced	
		Yes F (%)	No F (%)
1.	Online product delivery	181 (82.3)	39 (17.7)
2.	House Maids	176 (80)	44 (20)
3.	Online food delivery	175 (79.5)	45 (20.5)
4.	Restaurants/ other eateries	171 (77.7)	49 (22.3)
5.	Tailoring/ Plumbers/ Electricians/ Mechanics/ Others	170 (77.3)	50 (22.7)
6.	Public transport	165 (75)	55 (25)
7.	Shopping malls	165 (75)	55 (25)
8.	Cabs	165 (75)	55 (25)
9.	Car drivers	139 (63.2)	81 (36.8)
10.	Private transport	117 (53.2)	103 (46.8)
11.	Groceries	110 (50)	110 (50)
12.	Banks	100 (45.5)	120 (54.5)
13.	Fruits	97 (44.1)	123 (55.9)
14.	Clothes	92 (41.8)	128 (58.2)
15.	Meat and related products	90 (40.9)	130 (59.1)
16.	Vegetables	86 (39.1)	134 (60.9)
17.	Food	83 (37.7)	137 (62.3)
18.	ATMs	78 (35.5)	142 (64.5)
19.	Milk and related products	71 (32.3)	149 (67.7)
20.	Internet	66 (30)	154 (70)
21.	Vehicle fuels (petrol/ diesel)	61 (27.7)	159 (72.3)
22.	Mobile/ Landline services	52 (23.6)	168 (76.4)
23.	Television	48 (21.8)	172 (78.2)

Table.14 ANOVA for demographic wise differences in problems faced in availing products/ services due to COVID - 19 situation

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	5.990	23	.260	1.050	.405
	Within Groups	48.605	196	.248		
	Total	54.595	219			
gender	Between Groups	81.131	23	3.527	2.590	.000**
	Within Groups	266.955	196	1.362		
	Total	348.086	219			
Familysize	Between Groups	41.201	23	1.791	1.698	.029*
	Within Groups	206.781	196	1.055		
	Total	247.982	219			
Occupation	Between Groups	161.398	23	7.017	1.040	.418
	Within Groups	1322.947	196	6.750		
	Total	1484.345	219			

Table.15 Personal experiences/ Observations of the respondents during COVID - 19 situation (n = 220)

Sl. No.	Parameter	F	%
A.	Daily work		
1.	Increased	112	50.9
2.	Decreased	55	25
3.	Did not change	53	24.1
B.	Difficulty in purchasing products/ services		
1.	Low	25	11.4
2.	Medium	69	31.4
3.	High	126	57.3
C.	Change in product prices		
1.	Increased	148	67.3
2.	Decreased	5	2.3
3.	No change	67	30.5
D.	Changes in Mental Health (due to movement restrictions, pandemic situations, unable to meet friends/ relatives etc)		
1.	No change	127	57.7
2.	Unhappiness	64	29.1
3.	Stress	58	26.4
4.	Sleeplessness/ Insomnia	52	23.6
5.	Unnecessary anger	34	15.5
6.	Depression	33	15
7.	Anxiety	30	13.6
8.	Suicidal tendencies	4	1.8
9.	Increased Happiness	4	1.8
10.	Feeling lonely	1	0.5
11.	Little fear	1	0.5
12.	Restless energy	1	0.5
13.	Feeling suffocated	1	0.5

14.	Irregular eating habits	1	0.5
15.	Vertigo	1	0.5
16.	Ideal thinking	1	0.5
17.	Not having time for myself	1	0.5
E.	Changes in Physical Health		
1.	Healthy skin, hair, nails (due to lack of stress or pollution)	99	45
2.	Lesser headaches/ body aches	82	37.3
3.	Normal Blood pressure/ Diabetes control	68	30.9
4.	Reduction in occurrence of fevers/ cold/ coughs	57	25.9
5.	Healthy weight loss due to exercise/ yoga/ meditation	50	22.7
6.	Better menstrual health (only for female respondents)	41	18.6
7.	Weight gain	2	0.9
8.	Physical stress due to increased workload	1	0.5
9.	Increased body aches	1	0.5
10.	No changes seen	30	13.6
F.	Changes in the Environment		
1.	Lesser air pollution	214	97.3
2.	Lesser noise pollution	200	90.9
3.	Changes in the sky and freshness of air	171	77.7
4.	Healthy plant growth	140	63.6
5.	Sighting rare birds and their voices	127	57.7
6.	Proper maintenance of roads and drainages	123	55.9
7.	Proper collection of waste and safe disposal practices	118	53.6
8.	Observing and experiencing pleasing and Peaceful environment/ nature	3	1.4
G.	Experience of lockdown and staying at home for such a long period is making		
1.	Happy	51	23.2
2.	Unhappy	40	18.2
3.	Do not know / Cannot say	129	58.6

(Multiple responses were recorded, and hence the percentage exceeds 100)

Table.16 Post lockdown activities of the respondents

(n = 220)

Sl. No.	Activity done	F	%
1.	Attend office and complete the pending work	71	32.3
2.	Visiting a temple/ church/ mosque/ other religious places	53	24.1
3.	Go out or party with family/ friends/ relatives	39	17.7
4.	Go on a holiday	17	7.7
5.	Go for a shopping	14	6.4
6.	Stay at home a little longer	8	3.6
7.	Nothing specific	7	3.2
8.	Go out for a walk	2	0.9
9.	Meeting classmates and attend classes	2	0.9
10.	Meet family/ close friends and relatives	2	0.9
11.	Rest	1	0.5
12.	Connect with nature	1	0.5
13.	Want to go out and have a systematic way of living	1	0.5
14.	Medical check - up	1	0.5
15.	Try to change lifestyle	1	0.5

Fig.1 - 3 Demographic profile of the respondents

(n = 220)

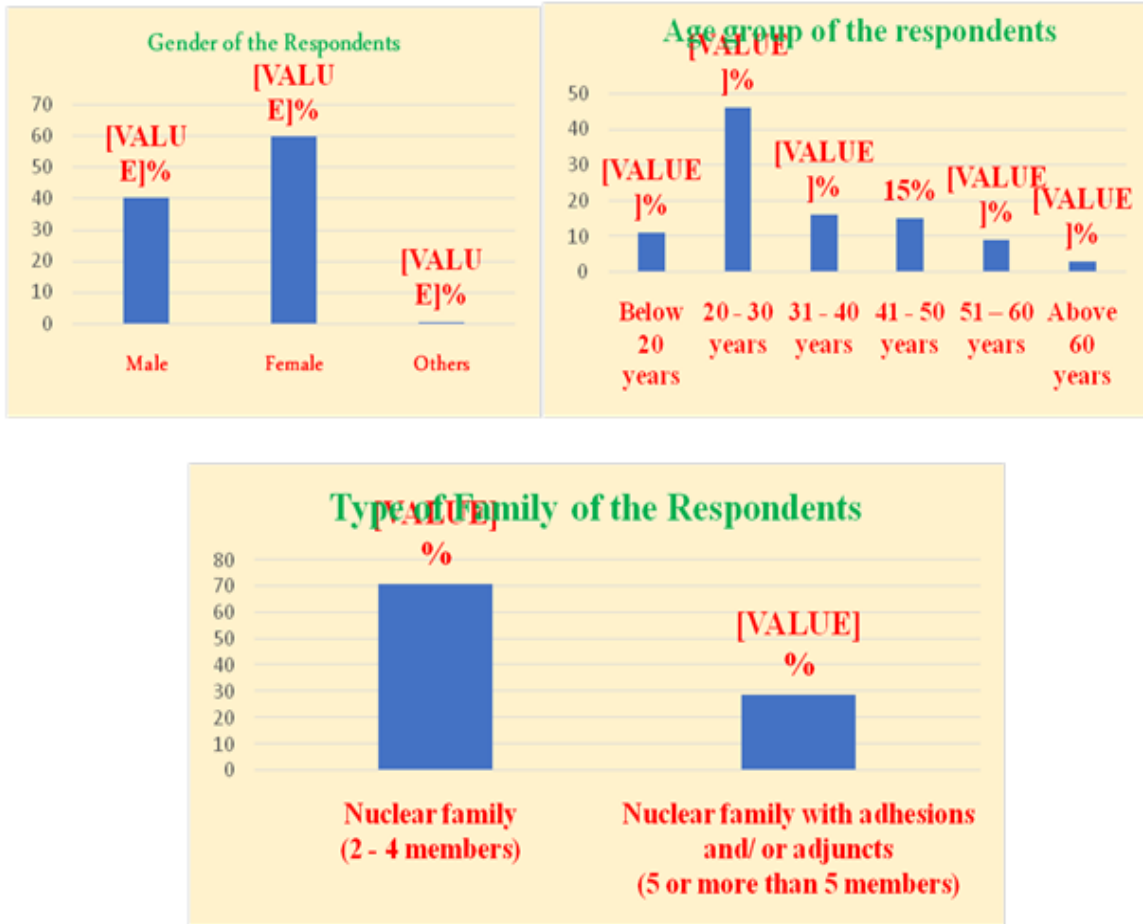


Fig.4 Awareness of the respondents regarding COVID - 19 precautions and measures taken

(n = 220)

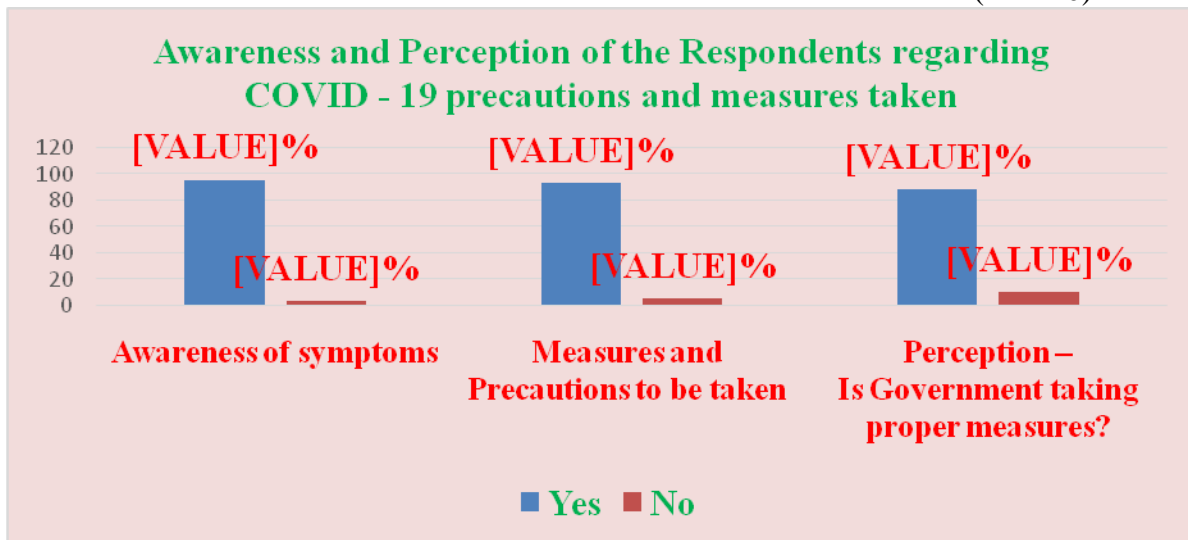
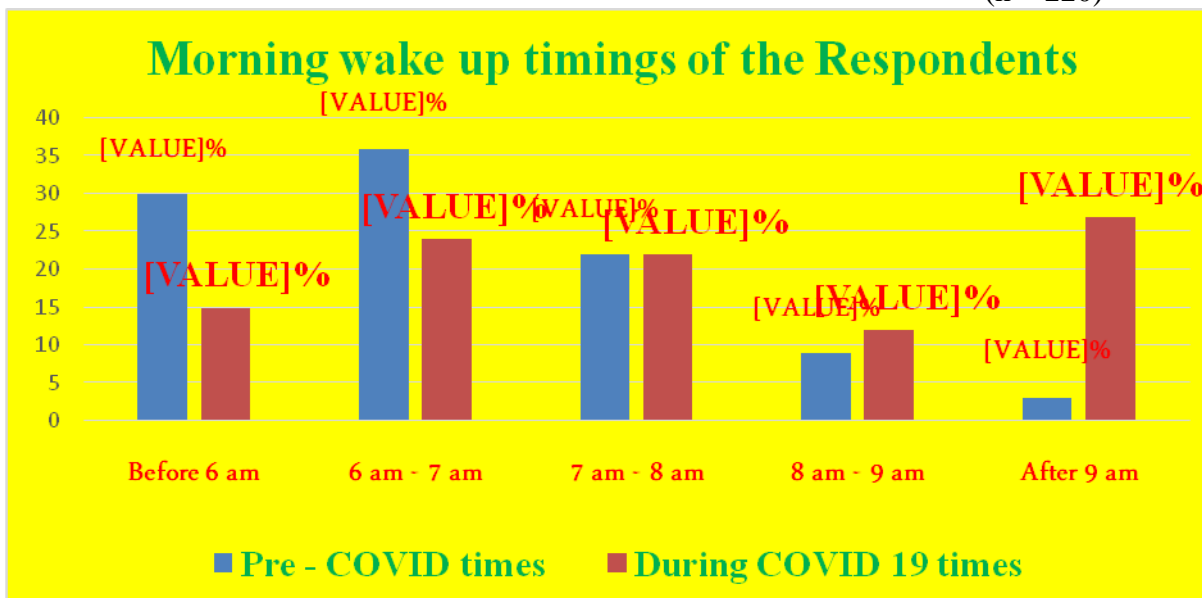


Fig.5 Changes done by the respondents regarding their wake up timings in the morning (n = 220)



Due to the lockdown and movement restrictions put up by the Government; factories were shut up, no public gatherings were happening, people were not going out frequently and unnecessarily and many more changes were being done. This results in less air and noise pollution from vehicles and factories, safer environment etc. When the respondents were asked about the changes they observed in the environment during COVID - 19 times; more than 90 per cent expressed of experiencing lesser air and noise pollution. Peaceful environment, fresh air, sighting rare birds, proper waste management, healthy plants were some of the other changes observed by the respondents (1% - 78%).

Around 23per cent of the respondents felt happy about the experience of COVID - 19 lockdown and staying at home for a long period; whereas 18 per cent feel unhappy. Majority of the respondents (59%) did not know or could not say about the experience of COVID - 19 lockdown. As most of the people’s lives were affected and altered due to this situation; the respondents might not be able to assess the positive and negative effects

happening to them in this lockdown period, as this is also a first time experience for them.

The respondents were asked about the first activity they would like to do after the lockdown is lifted up. Around 15 activities were quoted by the respondents. Highest number of respondents would attend their office and complete the pending work (32%); followed by visiting a temple/ church/ mosque/ other religious places (24%) and going out or party with family/ friends/ relatives (18%). It is good to see that around 4 per cent expressed that they would be staying at home for a little more time even after the lockdown period ends; in order to be more responsible and careful by safeguarding themselves against the COVID - 19 pandemic, as seen in the Table 16.

The results shown most of the respondents were females (59%). Most of the respondents belonged to the 20-30 age group (46%). Students (39%) were found major among all the respondents. Among all the respondents, 44 per cent belonged to a nuclear family. Among all the respondents, 71 per cent had

the provision of work from home option from their office.

Among all the respondents, 96 per cent have awareness on the COVID-19 symptoms, measures and precautions to be taken if they or their family members develop any symptoms (94%) and perceive that the Government is taking adequate measures in fighting against COVID 19 (89%). Thirty five per cent respondents started hoarding food products and basic necessities by anticipating the emergencies due to COVID - 19 situation between 11th- 20th March, 2020.

During the COVID -19 situation, 63 per cent of the respondents spent time with family for more than 4 hours and this increased compared to the Pre - COVID times. Fifty nine per cent did 1-2 hours of exercise per day, and it increased compared to the Pre - COVID times. Nearly 45 per cent and 54 per cent of the respondents spent 1-2 hours of time to cook and clean home/ utensils respectively, and even in this case the time spent increased compared to the Pre - COVID times. The time spent on Office/ Professional work and Recreation (Playing indoor/ outdoor games, Watching movies/ TV etc) also decreased compared to the Pre - COVID times by more number of respondents. The time spent for using mobile/ laptops (excluding official work/study), educational work and religious activities also increased among the respondents compared to the Pre - COVID times. Sleeping time during the day increased during the COVID - 19 lockdown situation for 26 per cent of the respondents.

Changes done by the respondents regarding the morning wakeup timings during the COVID -19 situation are: the number of respondents who woke up after 7 am drastically increased, and the respondents who woke up before 7 am decreased.

During the COVID - 19 situation, 34 per cent people purchased daily essentials once in 3 to 4 days and majority (90%) purchased through online mode. About 34 per cent respondents stocked food items or other necessities for 7 days.

Effects on the following issues due to Covid 19 situation: Income decreased for 41 per cent of the respondents and remained constant for majority of the respondents (54%). The expenditure incurred for clothing (64.1%), recreation (59.5%), food purchased from outside (78.6%), travel (80%), education (40%), Socialisation like parties (88%), Bank loans in terms of Moratorium facility (66%) and transportation costs (69%) decreased by the above said percentage of respondents. Likewise, the expenditure increased for the food prepared at home (76%), communication (40%) and savings (38%). Only the expenditure spent on house rent (86%) and house maintenance (56.8%) remained constant.

During the COVID -19 lockdown situation, respondents did not face any difficulty in availing goods/ services like groceries, food, milk and related products, fruits, vegetables, banks, ATMs, vehicle fuels (petrol/ diesel), internet, television, mobile/ landline services. But, the respondents faced difficulty in availing services like House Maids, Car drivers, Tailoring/ Plumbers/ electricians/ mechanics/ Others, Cabs, Online food delivery, online product delivery.

Around 51 per cent of the respondents felt that their daily work decreased, and 57 per cent felt high difficulty increased in purchasing products/ services and 67 per cent felt that there is an increase in the product prices due to COVID - 19 situation. Majority of the respondents felt that there is no change (58%) in their mental health and had positive changes regarding their physical health (45%).

The study results indicted some significant positive and negative changes in the lifestyles of the respondents due to the COVID - 19 situation. Literature too was reviewed to understand the similarities between the results of the present study and studies done in different parts of the world. They also highlighted about the significant lifestyle changes observed in their respondents due to the pandemic situation. Some of the positive lifestyle changes observed were having healthy meals, proper sleep, taking care of proper hygiene, spending time with family and exercising etc. On the other hand, some of the significant negative changes observed were related to the increased screen time, meal timings and quantity of food consumed, lack of exercise, mental stress etc.

These results cannot be generalised to the entire population in the world; as the living conditions of the local community and country, economic conditions of the families, their lifestyles, eating habits, stress coping mechanisms will vary from area to area and country to country. But on a positive note, the results of present study will surely be a substance of requirement for the individuals who are trying to understand and assess the effects of COVID - 19 pandemic on the lifestyles of different individuals and families; and motivate them to adjust to the unexpected emergencies that may occur in the future. Further in depth analysis can also be undertaken on this subject based on ones' own observations and perceptions as this is one of the important needs of the current times.

References

Balanzá-Martínez, V., Kapczinski, F., De Azevedo Cardoso, T., Atienza-Carbonell, B., Rosa, A.R., Mota, J.C and De Boni, R.B. 2021. The assessment of lifestyle changes during the COVID-19 pandemic using a multi

- dimensional scale. *Revista de psiquiatria y salud mental*. 14(1): 16-26.

- Banerjee, D. 2020. The COVID - 19 outbreak: Crucial role the psychiatrists can play. *Asian Journal of Psychiatry*. 50.
- Basu, S., Karmakar, A., Bidhan, V., Kumar, H., Brar, K., Pandit, M and Latha, N. 2020. Impact of lockdown due to COVID – 19 outbreak: Lifestyle changes and public health concerns in India. *International Journal of Indian Psychology*. 8 (2): 1385-1411.
- Brooks, S. K., Dunn, R., Amlôt, R., Rubin, G.J and Greenberg, N. 2020. A systematic, thematic review of social and occupational factors associated with psychological outcomes in healthcare employees during an infectious disease outbreak. *Journal of Occupational and Environmental Medicine*. 60: 248-257.
- Chopra, S., Ranjan, P., Singh, V., Kumar, S., Arora, M., Hasan, M. S., Kasiraj, R., Suryansh, Kaur, D., Vikram, N. K., Malhotra, A., Kumari, A., Klanidhi, K. B and Baitha,U. 2020. Impact of COVID-19 on lifestyle-related behaviours- A cross-sectional audit of responses from nine hundred and ninety-five participants from India. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*. 14(6): 2021–2030.
- Gigadocs.2020. Coronavirus Impact- Has COVID-19 Changed our Lifestyle for Good?<https://www.gigadocs.com/blog/coronavirus-impact-has-COVID-19-changed-our-lifestyle-for-good/>
- Hu, Z., Lin, X., Chiwanda Kaminga, A and Xu, H. 2020. Impact of the COVID -19 Epidemic on Lifestyle Behaviours and their Association with Subjective Well-Being among the General Population in Mainland China: Cross-Sectional Study. *Journal of Medical*

- Internet Research*. 22(8):e21176.
- Di Renzo, L., Gualtieri, P., Pivari, F., Soldati, L., Attina, A., Cinelli, G., Leggeri, C., Caparello, G., Barrea, L., Francesco, S., Esposito, E and De Lorenzo, A. 2020. Eating habits and lifestyle changes during COVID -19 lockdown: An Italian survey. *Journal of Translational Medicine*. 18:229.
- Kapasia, N., Paul, P., Roy, A., Saha, J., Zhaveri, A., Mallick, R., Barman, B., Das, P and Chouhan, P. 2020. Impact of lockdown on learning status of undergraduate and postgraduate students during COVID - 19 pandemic in West Bengal, India. *Children and Youth Services Review*. 116 (2020) 105954.
- Nair, D. R., Rajmohan, V and Raghuram, T.M. 2020. Lifestyle and psychosocial stress during COVID-19 lockdown – An online survey. *Kerala Journal of Psychiatry*. 33 (1): 5-15.
- Pfefferbaum, B and North, C. S. 2020. Mental health and the Covid - 19 Pandemic. *The New England Journal of Medicine*. 383: 510-512.
- Roy, S., Tiwar, S., Kanchan, S and Bajpai, P. 2020. Impact of COVID - 19 Pandemic Led Lockdown on the Lifestyle of Adolescents and Young Adults. *Indian Journal of Youth and Adolescent Health*. 7 (2): 12-15.
- Sharma, M. Family Types on the basis of Size of Household in India – Census India. <https://www.yourarticlelibrary.com/essay/family-types-on-the-basis-of-size-of-household-in-india/41330>.

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