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Impact of covid – 19 lockdown on health status during and before: based on a community perspective

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Abstract

Background: India poses a huge burden of Non-communicable diseases and has recognized the escalation of potential problems during the lockdown period. Assessment of community health delivers in large information about the community's recent status, needs, and health issues.

Methodology: This investigational concept was based on an epidemiological observational cross-sectional structured study among individuals in Kerala during the lockdown time frame. We had picked subjects arbitrarily from all age groups. The study was directed utilizing a Google form survey during May 2020 which was circulated through the web portal.

Results & Discussion: The survey recorded the participation of 716 individuals between the age of 11 and above 60 years. The majority trusted the doctors (64.24%), while others were more convenient with pharmacists (14.94%), family and friends (9.21%), and self-medication (7.40%). Participant's health status changed compared to previous conditions with maximum participant's weight remaining stable, and 40.78% of the participant's weight increased and only 12.01% of participant's weight decreased during the lockdown. About a half (52.51%) stated that they felt nervousness over a short period.

Conclusion: The pandemic led to social distancing and complete isolation from the community, has devastated a major change in people's attitude and access to healthcare and daily living. However, as the COVID-19 pandemic is still going on worldwide, the data requires further reinvestigation for the future, involving an extensive population under study.

Introduction

COVID-19, the pandemic of this decade is an infectious disease caused by a newly discovered novel coronavirus. The 2019 novel Corona Virus Disease (COVID-19) outbreak has been declared as an international public health emergency by the World Health Organization (WHO) on January 30,2020 [1]. India poses a huge burden of Non-communicable diseases (NCD) and had recognized the potential problem and so that the Government set up its robust response mechanisms by mid-January 2020 [2]. The most common reasons for discontinuing or reduction in services were cancellations of already planned treatments, lack of public transport, and mainly due to lack of staff because health workers had been reassigned to support COVID care services. A shortage of medicines, diagnostics, and other technologies can also be added as a reason for the discontinuation of services [3]. The leading risk factors for NCDs in India were a child and maternal malnutrition, inadequate dietary supply and intake of fresh fruits and vegetable, abusive agents like tobacco, drug-abusing and alcohol over usage, lifestyle disease like blood pressure, high fasting sugar in plasma, and, increased total cholesterol, other contributing factors like low physical activity, and high body mass index and involvement of air pollution. The dietary risks and high systolic blood pressure were linked to risk involving ischemic heart diseases and stroke [4]. A combination of frailty, aging, and vascular comorbidities, together with COVID-19, represents a scenario that can exponentially increase hospitalization, intensive care unit admission, and requires hospital readmissions [5]. The study involving health assessment in a community will give comprehensive information on the current health status of the community with its need and issues [6]. This survey is mainly done to record the health status while facing lockdown i.e., before initiation of lockdown to that of during the period of lockdown. Rehabilitation services have affected widely and disturbed the life thereby patients were unable to move with their monthly checkups [1]. Also, the emergence of pandemics

brought in fear and anxiety among the individuals with an alarming rise in concern for the future can be over whelming and these can cause a strong emotional breakdown in both adults and children [1]. Many of us confined to home for an extended period may affect our mental wellbeing and thereby can lead to depression. So, it's an utmost important factor to assess the mental health of people which plays a role in the development of pandemic indued change in the mentality of people.

Methodology

The investigation was propagated as an Epidemiological observational cross-sectional structured study among individuals during the lockdown in Kerala. The study involved all age groups by circulating Google form during May 2020. The investigation involved an online survey where, the participants were informed about the purpose, benefits, and privacy. The individuals who were intrigued via giving consent, followed by the questions. The information gathered was exclusively available to the examiners and guaranteed that all data given were used exclusively for research keeping in mind the privacy of individuals.

The study involved the populace from Kerala by sharing the Google form to more than 1000s of individuals through social media. The questionnaire was designed such that it takes just 5 minutes to finish the survey. The data procurement was stopped after 3 weeks with an all-out interest of 731 individuals, including 15 who didn't consent. A predesigned, pretested, sorted out, review containing both open-and close-ended questions with options was made in the English language. A pilot study was driven with 15 people to guarantee that they could fathom the questions and produce fitting answers. Before the commencement of the survey, all missteps in questions were corrected. The questionnaire focused on age, gender, wellbeing status, mental status, social propensities, malady state, and so forth during and before were incorporated. The whole data were anchored in excel for graphical representation and estimation was done using SPSS version 25 and G Power version 3.1.9.2. The variables were expressed in both frequencies followed by percentages for easy understanding. The paired T-Test was incorporated to demonstrate the difference among the variables.

Results

The web survey involved 716 participants aged between 11 and above who were categorized into various groups. The female respondents outnumbered the male population with 60.61% to that of 39.39%. In terms of economic status, the leading representation was observed from middle-class families (88.12%). Based on the analyzed reply, the maximum respondents belonged to the Semi-urban area (47.62%) followed by rural (36.87%), and the urban area (15.50%). A total of 49.58% were alcohol users, trailed by 24.86% representing smoking habits and 1.25% as tobacco users (Table 01).

Table 01: Food habits of Participants (n=716)

Diet				
		Male	**Female**	**Total**
Before lockdown	Organic Outdoor Non-organic	144(35.64%) 105(41.33%) 33(56.89%)	260(64.35%) 149(58.66%) 25(43.10%)	404(56.42%) 254(35.47%) 58(8.10%)
During lockdown	Organic Outdoor Non-organic	237(39.04%) 26(37.14%) 19(48.71%)	370(60.95%) 44(62.85%) 20(51.28%)	607(84.77%) 70(9.77%) 39(5.44%)
Food Poisoning				
Before lockdown	Yes No May be	64(43.83%) 190(36.89%) 28(50.90%)	82(56.16%) 325(63.10%) 27(49.09%)	146(20.39%) 515(71.92%) 55(7.68%)
During lockdown	Yes No May be	6(30%) 269(39.67%) 7(38.88%)	14(70%) 409(60.32%) 11(61.11%)	20(2.79%) 678(94.69%) 18(2.51%)
Category				
Non-Veg		270(40.72%)	393(59.27%)	663(92.59%)
Veg		12(22.64%)	41(77.35%)	53(7.40%)
Frequency of having Non-Veg in this lockdown				
Increased		62(46.26%)	72(53.73%)	134(18.71%)
Decreased		105(41.83%)	146(58.16%)	251(35.05%)
		104(35.73%)	187(64.26%)	291(40.64%)
Didn't have		11(27.5%)	29(72.5%)	40(5.58%)

On observing the lifestyle changes during the COVID-19 lockdown, it was noted that the alcohol intake habit has drastically changed, where it was recorded that, out of the total alcohol consumers (355), 52.11% had alcohol 3 to 12 months back, whereas 29.57% had it 1 to 3 months before, 10.14% had consumed in the previous week and 8.16% had it about 1 week to one month ago. A significant difference was also observed between the percentage of people who had an average number of drinks in lockdown (Figure 01), it is clear from data that a drastic reduction in alcoholic drink took place during the time frame and on observing the craving for alcohol it was observed that 81.69% never felt any carvings, while the rest managed their cravings by having good sleep (11.83%), with medicines (2.53%), by psychological support (1.40%), and by socialization (2.53%). The result clearly indicates that most males are taking alcoholic drinks even though only a few suffered from its craving (Figure 01).

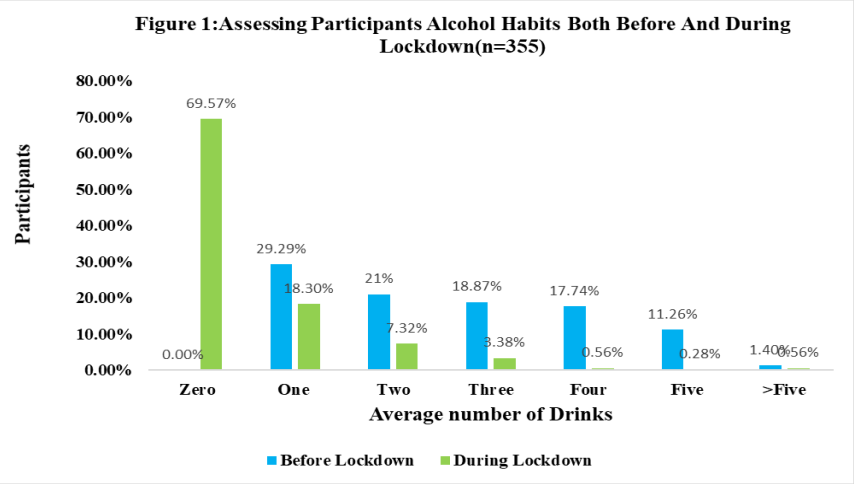

Figure 01: Assessing the participant's Alcohol habits (n=355)

Smoking, the second social habit when analyzed, about 178 people represented smoker group, which corresponds to 24.86% of the study. Further investigating it was found that 14.04% represented as daily smokers and the rest 85.95% as occasional smokers. On observing smoking habits change, it was noted that a high reduction in smoking habit took place (Figure 02) and 46.06% were not having any craving. Interestingly it was observed that even though 48.87% had cravings they kept themselves away from any treatment, and the balance 5.05% managed craving by using nicotine chewing gum. Thus, here also the data reveals that males are leading smokers, and the non-availability of cigarettes induced fewer cravings.

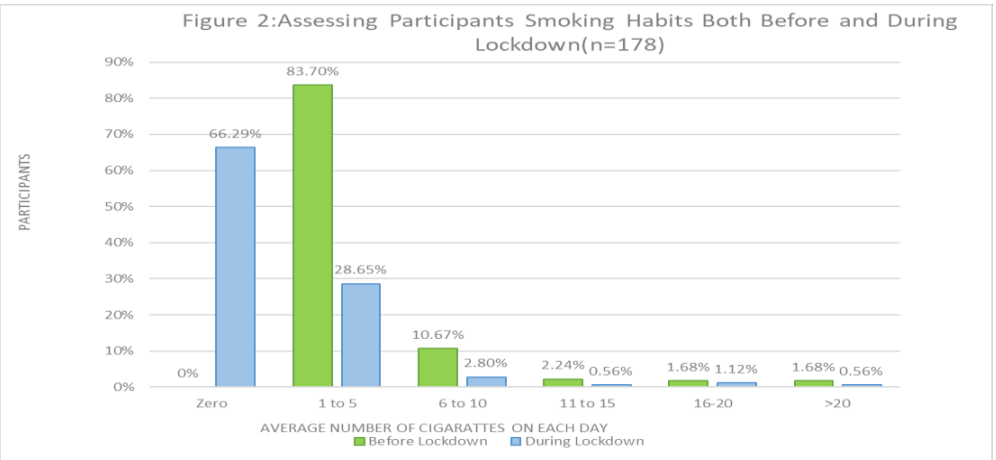

Figure 02: Assessing the participant's Smoking Habits (n=178)

This study also indicated that the lockdown period gave more leisure time than usual and on the investigation on how they spend their leisure time, it was known that 33.3% were indulged in work from home, followed by 25.97% stated spending their time doing some exercise like walking, cycling, or by doing other light activities for at least 4 hrs. a week and 24.16% of the participants were involved in an exercise like jogging or engaged in sports or doing some gardening. Thus, it suggests that people, mainly females have become more and more health-conscious and were engaged in doing some sort of workouts to improve their health. Whereas, 25.4% stated noninterest in doing any sort of activities and thereby leading a sedentary lifestyle. In that case, also, the female's representation was higher towards noninterest in leisure time activities. On evaluating the physical activity, male participants outnumbered females by engaging themselves in doing exercises, it was also observed that 54.19% of individuals were involved in doing endurance kind of exercises, followed by 28.06% involved in flexibility type of exercises like yoga and 17.74% were doing exercises like weight lifting to gain strength.

On enquiring about food habits, it was noted that a tremendous increase in organic food consumption took place in both the genders while under lockdown (84.77%) than before (56.42%), thus the number of food poisoning cases dropped and only 2.79% reflected to be affected with food poisoning, it was tenfold lower than before (20.39%). However, female's representation for food poisoning was higher than males. Concerning eating habits, 92.59% of the study population were non-vegetarians and only 7.40% were vegetarians. The study recorded a reduction in non-veg consumption among both genders during the lockdown with a net effect of 35.05% stating decreased intake and 5.58% completely stopped non-veg. Whereas, 40.64% maintained a stable intake and 18.71% reported an increased frequency of consumption of non-veg.

The survey requested to point out the diseases they were suffering and 331(46.22%) respondents stated they were suffering from conditions like renal and hepatic impairments, cardiac and respiratory problems, cancer, and other conditions. On further inquiring about any additional illness during this lockdown, 156 (21.78%) stated they suffered only some minor additional illness. Concerning psychological status, (Table 02) indicates that the pandemic is inducing fear, and so many respondents choose to stay indoors and were ready to socially isolate themselves to prevent themselves from being infected. The bulk of participants (86.31%) were psychologically well, whereas 13.68% reported upset about the current situation and the statement was mainly stated by females (56.12%). About half the respondents concluded that they initially felt nervous for a bit of the time (52.51%), others felt nervousness only for a good bit of the time (12.9%), some felt nervous for a bit of time (5.02%) and a few felt nervous for all the time (1.11%). On other hand, 28.49% never felt any nervousness. The survey also assessed the reason regarding their nervousness and about half the respondents (51.81%) were nervous because of the COVID 19 outbreak, and 37.43% stated the reason as the concern for family's health (37.43%) followed by job security (21.64%) as a major worry. So, the burden of the outbreak was assessed by asking regarding the need for an extension of the lockdown period. For which, 40.36% were confused about whether they want or do not want an extension, followed by 32.9% reporting that they didn't want an extension, and finally 26.9% who have put health as major issues and voted for an extension in lockdown period. The female population has mostly opted for an extension of lockdown.

Table 02: Psychological assessment of participants during lockdown (n=716)

Have you felt calm and peaceful by staying at home			
	Male	**Female**	**Total**
Yes	239(38.67%)	379(61.32%)	618(86.31%)
No	43(43.87%)	55(56.12%)	98(13.68%)
Where you a very nervous person during this lockdown period			
All of the time	3(37.5%)	5(62.5%)	8(1.11%)
Most of the time	17(47.22%)	19(52.77%)	36(5.02%)
A good bit of the time	42(45.65%)	50(54.34%)	92(12.9%)
A little bit of the time	140(37.23%)	236(62.76%)	376(52.51%)
None of the time	80(39.21%)	124(60.78%)	204(28.49%)
Reason for being Nervous			
COVID -19	166(44.74%)	205(55.25%)	371(51.81%)
Job security	96(61.93%)	59(38.06%)	155(21.64%)
Family health	124(46.26%)	144(53.73%)	268(37.43%)
studies	13(32.5%)	27(67.5%)	40(5.6%)
Depression	13(40.62%)	19(59.37%)	32(4.46%)
Future	6(54.54%)	5(45.45%)	11(1.53%)
Parents scolding	3(100%)	0	3(0.41%)
Food security	3(75%)	1(25%)	4(0.6%)
Increase in prize	5 (83.33%)	1(16.66%)	6(0.9%)
Online Platform	3(42.85%)	4(57.14%)	7(0.97%)
Exams	8(30.76%)	18(69.23%)	26(3.7%)
Extension of lockdown period needed			
Yes	88(45.83%)	104(54.16%)	192(26.9%)
No	84(35.74%)	151(64.25%)	235(32.9%)
May be	110(38.06%)	179(61.93%)	289(40.36%)

The mental status and health status of the participants (Table 3) indicated a slight dip in mental health status in lockdown, and the case was true with females, where mental health declined, which was indicated by the rise in population from 1.11% to 2%. Similarly, in the case of health status, about 0.41% felt their health was poor during the lockdown than before (0.27%). The survey

also alarmed that male participant's health got out of condition during lockdown than before. We can understand that while others responded their health status during the lockdown was excellent (10.89%), very good (20.53%), and good (27.93%), but a few respondents (1.95%) reported that there is a worsening of their condition due to their pre-existing disease.

Table 0*3*: Overall State of Mental and Health status of participants before and during COVID-19 emergency (n=716)

The overall concept of Mental status				
		Male	**Female**	**Total**
Before lockdown	Excellent	61(49.59%)	62(50.40%)	123(17.17%)
	Very good	90(41.28%)	128(58.71%)	218(30.44%)
	Good	109(36.33%)	191(63.66%)	300(41.9%)
	Fair	15(30.61%)	34(69.38%)	49(6.9%)
	Average	4(22.22%)	14(77.77%)	18(2.51%)
	Poor	3(37.5%)	5(62.5%)	8(1.11%)
During lockdown	Excellent	82(53.94%)	70(46.05%)	152(21.22%)
	Very good	73(40.10%)	109(59.89%)	182(25.41%)
	Good	91(35.27%)	167(64.72%)	258(36.03%)
	Fair	23(28.04%)	59(71.95%)	82(11.45%)
	Average	9(32.14%)	19(67.85%)	28(4%)
	Poor	4(28.57%)	10(71.42%)	14(2%)
The overall concept of Health status				
Before lockdown	Excellent	52(47.27%)	58(52.72%)	110(15.36%)
	Very good	90(40.9%)	130(59.09%)	220(30.72%)
	Good	116(37.06%)	197(62.93%)	313(43.71%)
	Fair	20(33.89%)	39(66.10%)	59(8.24%)
	Average	4(33.3%)	8(66.66%)	12(1.67%)
	Poor	0	2(100%)	2(0.27%)
During lockdown	Excellent	76(53.52%)	66(46.47%)	142(19.83%)
	Very good	102(41.97%)	141(58.02%)	243(33.93%)
	Good	87(32.58%)	180(67.41%)	267(37.29%)
	Fair	12(27.27%)	32(72.72%)	44(6.14%)
	Average	3(17.64%)	14(82.35%)	17(2.37%)
	Poor	2(66.66%)	1(33.33%)	3(0.41%)
Health status changed compared to the previous disease				
Excellent		48(61.53%)	30(38.46%)	78(10.89%)
Very good		65(44.21%)	82(55.78%)	147(20.53%)
Good		77(38.5%)	123(61.5%)	200(27.93%)
No change		86(31.04%)	191(68.95%)	277(38.68%)
Worsen		6(42.85%)	8(57.14%)	14(1.95%)
Weight Gain during Lockdown				
Increased		107(36.64%)	185(63.35%)	292(40.78%)
Decreased		38(44.18%)	48(55.81%)	86 (12.01%)
Stable		136(40.23%)	202(59.76%)	338(47.20%)

On enquiring about weight gaining, it showcased that 47.21% of people's weight remained stable, whereas 40.78% of the participant's weight increased and only 12.01% of the participant's weight got decreased. The interesting fact reported here is that females gained more body weight than males during the lockdown, whereas the females outnumbered the males via losing weight (55.81%) and maintaining stability in weight (59.76%).

The new method utilized by hospitals to avoid patients utilizing hospital facilities was the incorporation of tele-medication. So, the study evaluated the most convenient and trusted medicine expert for the participants. The most response received was for doctors (64.24%) and then for the pharmacist (29.32%). Others included family/friends (9.21%), self (7.40%), and internet (4.18%). The study further evaluated the consultation habits of people while under lockdown and it was recorded that doctors were the highly consulted with 42.45% followed by family and friends (29.32%). Others include self (23.46%) internet (21.92%), pharmacist (21.78%) and tele-medication (7.90%). As the

COVID-19 spread across the world with fear of life, and as the prevention was attaining more importance by boosting up the immunity, 34.77% reported involving drinking health drinks, and 13.12% depended on homeopathic medicines, followed by Allopathic (9.35%) and Ayurvedic (8.37%) system. The interesting part was that all the preventive measures were experimented with and responded to by females.

The study also observed a significant change in the food habit scores for before (M=1.48, SD=0.81) and during (M= 1.08, SD=0.36) lockdown, t (715) =13.204 p = 0.000. whereas, the circumstances of food poisoning drastically dropped, observed by the change in cases for both before (M=2.20, SD=0.93) and during (M= 2.75, SD=0.61) lockdown, t (715) = -0.4675, p= 0.000. A paired-samples t-test was utilized to compare to ascertain the effect on mental status conditions. The values indicated no significant difference in the scores for before (M= 4.50, SD=1.008) and during (M= 4.43, SD=1.170) lookdown; t (715) =1.627, p = 0.104. indicating a negligible effect on the population. On comparing the health status, of people a significant difference was observed in the scores for before (M= 4.49, SD=0.926) and during (M= 4.61, SD=0.975) conditions; t (715) =-4.4174, p = 0.000, indicating better health.

Discussion

The main concern for the alcoholic was their physical and socially responsible functioning, and also their mental well-being concerning the addition of alcohol, which will definitely be abysmally affected in this crisis. Prolonged travel-ban across the world has confined the supply of recreational substances in the market. So, the study recorded that the people are carefully utilizing the alcohol stock present with them. As the study was conducted during the start of lockdown where the Kerala state had restricted opening the beverages and wine parlors for 3 months. So, the respondents who were not addicts had their last drink about 3 to 12 months ago (52.11%) and others had it in 1 month to 3 months ago (29.57%),1 week to a month ago (8.16%) and some had it during last week of the survey (10.14%). But the alcohol addicts found it difficult and many alcohol-dependent persons have reportedly found their sanctum in homemade alcoholic spirits, sanitizers (containing non-edible alcohol) [7]. So, by concerning these factors the Government finally decided to reopen the beverages and wine parlors.

A significant difference was witnessed in participants who were taking alcohol during the time frame (Figure 01). The reduction in alcohol consumption during lockdown might be due to decreased financial ability and the decreased availability of alcohol in bars and beverages. However, the availability of alcohol should be controlled after lockdown, as previous studies state that, there is a chance of high risk due to harmful drinking after relapse.8 Here, an increased consumption was recorded among some individuals, due to the distress experienced in COVID-19 environment. However, increased consumption of alcohol would not only add to the usual disease burden associated with alcohol but also add to the COVID-19 load, particularly heavy drinking, which may weaken the innate and acquired immune system.9,10 Out of 355 participants, 290 (81.69%) subjects were not suffering from the craving to drink. The rest managed it by having medicines, socialization, good sleep, and psychological support, etc.

In this study, the majority were occasional smokers (85.95%) with involvement of 1-5cigarettes per day before lockdown 83.70% and now a diminution in the number of cigarette usage during lockdown (66.29%) occurred (Figure 02). The main reason for the cessation of smoking by most respondents might be the fear that COVID-19 a disease involving the respiratory tract and the thought that smokers were more virus vulnerable. Previous studies have shown that smoking is detrimental to the immune system and that smokers are twice more likely than non-smokers to develop influenza and have more severe symptoms [11]. Also, smokers were reported to have higher mortality in the previous MERS- CoV outbreak. But the decision of smoking cessation by many respondents is a virtuous decision that supports the recovery of airway ciliary clearance and immune function by 1 month. 12 Also, Cigarette smoking increases the expression of ACE-2 in pulmonary tissues, which could in part account for the increased risk of infection [13]. Additionally, the WHO has noted that there is an increased frequency of hand-to-face reciprocal movements in smokers, which may contribute to increased opportunity for virus entry [14].

As COVID-19 resulted in the shutdown of offices and educational institutions all across the state, it resulted in a new culture of working, where the individuals were doing their job by sitting at home and students attending their classes online. Therefore, the educational system saw a dramatic change, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms. But in terms concerning the learner's condition with financial ability and accessibility of the internet for students, these two factors affected many of the learners.15

Most participants were engaged in endurance (54.19%) kinds of exercises like walking, jogging, swimming, cycling, and many more. Exercise helped to counteract the negative magnitudes implemented by diseases, like; diabetes, hypertension, cardiovascular diseases, respiratory diseases, and more.

As this pandemic entangled a nationwide lockdown, a significant percentage of individuals thus experienced modification of dietary habits manifested by eating more organic food (84.77%) than before (Table1). The main challenge that was faced by the participants was the closure of food suppliers and hotels which could have resulted in a shift in food habits leading to consumption of organic farm products. This is noteworthy as good nutritious food can lend good health and well-being, particularly when a disease is challenging the immune system.16 As only some participants were dependent on outside food so, self-managed or self-cooked food led to fewer cases of food poisoning during this lockdown. It was also observed that the non-vegetarians consumption decreased (35.05%) as a result probably indicating the fear of virus spread through the consumption of non-veg food items.

In this survey, 331(46.22%) participants reported of pre-existence of diseases and during home confinement, only 156 (21.78%) participants reported the occurrence of diseases, which were minor ailments with an exception of a very few hyperglycaemias and chest pain symptoms.

As the Kerala state was under lockdown with home confinement for a prolonged period, it resulted in conditions leading to psychological problems (Table 2). Depression and anxiety were reported from students and the adult population. The probable cause may be in the uncertainty and postponements of examinations (3.7%) in schools and colleges, and with regards to the availability of jobs (21.64%), career (1.53%), etc. Despite all the efforts by teachers to educate students online, but the impact recorded was not optimum. The primary reason being, unaffordable online platforms (0.97%) and inability to smoothly shift from classroom mode to online learning (5.6%), which prompted negative effects on the student's career path. Anxiety among students is related to poor economic conditions, daily life events, and hampered academic activities.17 The factors that lead to distress include longer quarantine duration, infection fears, frustration, boredom in isolation, inadequate commodity supplies, inadequate disease information, and financial loss (Table 02). The scarcity of appropriate protective measures was a concern among medical professionals and the public.18 The governments, media, doctors, researchers, celebrities, police, and other stakeholders appealed to the public to avoid public gatherings and maintain social distancing, to globally prevent the spread of coronavirus infection.19 Though maximum people were calm and peaceful by staying at home (86.31%). It's indicated that clear communication via government to the public is essential to maintain calmness in public and thereby ensuring greater social cooperation. The technological utilization to maintain close communications between government officials and the public may be the new norm shortly.20 The reasons for nervousness for a short duration might be due to the COVID-19 pandemic, job security, family health, and might be due to thinking about their studies, exams, future, scolding of parents, food security, increase in the price of things, and online platforms. The results showcased that both, job insecurity and COVID-19 fear were completely associated with symptoms of depression and that the effect of job insecurity on depressive symptoms was low in people with less fear of COVID-19.21 Participants from urban environments depend mostly on food production from the rural world. But the pandemic has highlighted the weakness of current citizen consumption habits, especially among vulnerable communities [22]. Another aspect to be noted was the lockdown forcing many markets and shops to shut, resulting in difficulty to access fresh food leading to low purchases from local suppliers (0.6%) and thus affecting their livelihood. The shortage of food can lead to an increase in the price of commodities (0.9%). Hence to avoid the nervousness of the public, the government should put in place self-regulatory mechanisms and should provide fair prices for the farm products.23 So, by doing this we can control the scarcity of food to a limit. In another aspect, people who are quarantined and have lower household incomes might require additional levels of support, along with those who lose earnings while in quarantine (21.64%) (i.e., self-employed people who are unable to work or salaried staff who are unable to take paid leave). Financial reimbursements should be provided where possible and programs should be developed to provide financial support throughout the quarantine period. Being unable to get regular medical care and prescriptions also appeared to be a problem for some participants (37.43%) who were suffering from diseases [24]. Most were not sure (40.36%) whether they wanted an extension of a lockdown or not. This confusion might be due to the wide spreading of the Coronavirus all over the world and participants were extremely concerned about becoming infected or transmitting the virus to others. Quarantine is an unpleasant experience because it separates the person from his/her loved ones, there is a loss of freedom, uncertainty over disease status, and boredom strikes. The quarantine can be made tolerable by telling people what is the circumstances and why the quarantine is needed, explaining how long the quarantine life will continue. Their boredom can be avoided by providing meaningful activities for them to do while in quarantine, providing clear communication, ensuring basic supplies (such as food, water, and medical supplies) are available, and this pandemic has brought the opportunity for the world to reinforce the sense of altruism that people should, rightly, be feeling [24].

The report generated showed that the overall mental status (Table 3) during lockdown led to a negative impact on the participants. The data suggest that females suffered a greater psychological impact from the outbreak (Table 3) as well as higher levels of stress, anxiety, and depression. This finding corresponds to a previous epidemiological study that found that women were at higher risk of depression.25From this survey, we can see that the overall mental status was found to be worsened (2%) than before lockdown (1.11%). Participants who already have a disease condition and those who experienced illness during lockdown with some acute and chronic non-COVID-19 conditions are present in our study. Moreover, even those patients who have had scheduled an outpatient visit or those who want to consult doctors for medical advice never approached due to fear of leaving their home or inability to go out. Also, the pandemic brought about a drastic reduction in hospital admissions for other ailments apart from COVID-19. Self-presentation at the emergency department (ED) was discouraged and involvement of fear of infection further led to a significant decrease in ED access [26]. But to reduce morbidity/ mortality and to assure best and safest treatment to all patients treated according to the recommendations and the published guidelines a proper plan is to be executed as the survey reported that the health status of the respondents changed positively compared to previous diseases (Table 03). As only a few participants were recognized with worsened condition (1.95%) which implicate the (Table 03) need for fewer patients out-patient visits based on disease severity or chronic diseases with regular follow-up

can be done through semi-automated artificial intelligence systems to avoid further worsening of the underlying diseases. On the other hand, milder conditions are to be managed by implementing telemedicine and creating networks of general practitioners who can be consulted for the visit if required for in-hospital specialist treatment. The main advantage of online consultation via telemedicine services is to eliminate overpopulated hospitals and provide real-time consultation where a physician has more time for consultation. The hospital-dispensing drugs can assure the timely supply of drugs, by sending medication directly to the patient's home, this will ensure lesser people in the hospital and can avoid unnecessary access. Home delivery or telephonic patient counseling can reduce the stress in patients and their caretakers about the importance of compliance to treatment, which could decrease generalized anxiety.26 The participant's weight increased (40.78%) and some remain stable (47.20%) during the study period. This hike in body weight can be due to stress and boredom effect leading to overeating as a means to escape monotony. On the other hand, physiological stress reactions might lead to eating restrictions that mimic the internal sensations associated with feeding-induced satiety.24 Moreover, the restaurant foods and snacks, processed meat, carbonated and sugary drinks consumption decreased due to nonavailability in lockdown.

We need to fully enact a transition to a more modern model of the health care system, which was supported by 53.91% of people via stating positively towards implementation of Tele-medication as a modern care model. However, Telemedicine can be helpful for the patients to get in touch with their physicians from the home comfort and keeping themselves away from hospitals which could decrease the spread of infection [27]. But, telemedicine must no longer be considered as a possible option or add-on to react to an emergency. Rather it should be considered as an approach to secure continuity of care to patients suffering from chronic diseases, for which care cannot be postponed during national emergencies [27]. One of the most significant findings in this study is that various participants have low knowledge (28.91%) about telemedicine technology and the survey points out that the participants have higher trust in doctors (64.24%), followed by a pharmacist (14.94%) rather than any other health professionals and still some participants seek face-to-face consultation (42.45%) during the lockdown. This might be because of decreased cases of virus infection that were reported at the beginning of lockdown in India and the Government allowed the patients to visit their doctors for consultation during the lockdown period. However, to prevent the virus attack, participants were curiously opting for many measures to boost up their immunity, some of them like health drinks, ayurvedic medicines (8.37%), allopathy (9.35%), and homeopathy (13.12%). This report also states a high amount of consumption of health drinks (34.77%), which may be rich in Vitamin C supplementation has been shown to decrease the duration and severity of upper respiratory tract infections, such as the common cold, and significantly decrease the risk of infection when given prophylactically in people under enhanced physical stress [28]. Accordingly, in the present situation, stress and anxiety due to the coronavirus pandemic can be effectively managed by the practice of yoga and Ayurvedic medicines [29]. Clinical evidence based on the use of herbal medicine in the treatment of SARS coronavirus (SARS-CoV2) has shown significant results that herbal medicine has a beneficial effect during the ongoing epidemic diseases [30]. The role of other systems of medicine like homeopathy or Ayurveda may also be considered in equipping people with immunity build-up, so further exploration is required for a role to play, as a vast number of patients only exhibit mild disease and participants may be empowered for self-care at home, without any standard monitoring, follow-up, or treatment [31].

Conclusion

The pandemic named COVID-19 is still a burden on countries which led to lockdown with subsequent social distancing, including complete isolation for some people. The disease is responsible for a rapid major change in people's healthcare access and daily living routines. The diet practices and healthy exercise were limited and digitalization got increased, which was responsible for stress, anxiety, and loneliness, leading to mental health depletion. This thus brought in a decline in quality lifestyle and ultimately affected the decision of one's health choices by limiting the selections and ultimately leading to the selection of natural resources and other organic matters.

Authors Contributions

All authors contributed equally to all kind of work

Conflict of Interest

There is no conflict of interest.

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Abbreviations

COVID-19: 2019 novel Corona Virus Disease
WHO : World Health Organization
NCD : Non-Communicable Diseases
ED : Emergency Department
M : Mean
SD : Standard Deviation

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