

Original research article

The unintended consequences of COVID-19 lockdown: Qualitative study from a rural area in Trichy, India

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Abstract

Introduction: Different countries had taken several measures to control the spread of COVID-19. India, being a developing country with a huge population had taken several steps, of which the nationwide lockdown was a major initiative during the start of pandemic in April 2020. Though the main objective was to protect the health and save lives, lockdown itself may have various unintended consequences. Since it was first lockdown of its kind, a qualitative study was undertaken to provide a better understanding of its impact.

Objectives: To explore the unintended consequences of COVID-19 lockdown among a rural population in Trichy, India.

Methods and Material: A qualitative study comprising of in-depth interviews was done using descriptive (transcendental) phenomenology, between May-June 2020. Interviews were conducted till data saturation occurred. A total of 23 individuals were included and analysis was done.

Results: Financial issues and difficulty in buying daily items were the negative study findings but we have also identified several positive impact of the lockdown such as spending more time with family, getting to know the neighbors better, switching over to healthy diet and realizing ones purpose of life.

Conclusions: Findings of this study will help all stakeholders in understanding the behavior and psychology of individual residing in a rural area towards lockdown. Analysis of findings from such studies need to be done while implementing lockdown if needed in future to reduce the unintended consequences.

Key words: consequences, COVID-19, lockdown, rural, unintended

Introduction

Globally we have been challenged with several outbreak of communicable diseases such as SARS, Ebola, Lassa fever and Nipah virus in the recent years. On March 11, World Health Organization (WHO) declared COVID-19 outbreak a pandemic, which is rapidly evolving.¹ As an economic hub with substantial global connectivity and movement of people and goods, India is directly affected by COVID-19 pandemic. Government of India (GOI) has taken several preventive and mitigating measures such as tightening of international travel, setting up quarantine facilities, suspending metro and railway,

closure of educational institutions, contact tracing of infected persons and most importantly social distancing measures. These measures have been implemented for the whole nation, for a period of 21 days initially with effect from 25th March 2020.²

It is the first time in history that a country like India with over 1.3 billion population is going for a nationwide lockdown. Though there is limited evidence that social distancing can help to prevent transmission of viral infection,³ it was the best option available to delay the onset of epidemic and flatten the curve of burdening the health care system.⁴ Unfortunately, there are unintended

consequences due to this public health measure which needs to be understood. Social science research will help to understand the social and economic impact which will help policy makers to take action to lessen the negatives and enhance acceptability and adherence to infection control practices during epidemic situation in future.⁵ The present study was conducted with the objective to explore the unintended consequences of COVID-19 lockdown in a rural population of Trichy, India.

Material and methods

Study design and method: A qualitative study was done using descriptive phenomenology with the objective of understanding the unintended consequences of lockdown among rural population in Trichy. This study was conducted during first wave of COVID-19 in India between May to June 2020.

Research team: Two researchers (PT and KH), trained in qualitative research were involved in conducting the interview. Third researcher (SK) was not involved in data collection but involved in data analysis to avoid bias in interpretation of data.

Study subjects, study setting and sampling technique: The study participants comprised of those above 18 years of age and residing in the surroundings of a rural primary health center of a medical college. This catchment area comprises a total of 5,112 households with a population 19,432. Majority of the residents are agricultural workers or daily wage labourers working in nearby town and few others own petty shops. Study participants were selected from the list of contact numbers available with medical social workers of the health center. Those individuals willing to give consent for interview were included for the study. Those not attending the call on two consecutive attempts on different days were excluded. Interviews were conducted till no new themes emerged.

Data collection: In-depth interviews were conducted using semi-structured interview guide Quantification of flow of Biomedical waste during the global pandemic COVID-19 significantly

with probes. The questions were framed to collect details on the impact of lockdown on their daily routine, personal life, social interaction, economic and work status etc. Probes were used based on their responses to obtain more information on their experiences on the above mentioned aspects. Pilot testing of the interview guide was done among two individuals and necessary changes were made. Content validation was done by senior experts in social science research.

Institutional ethics clearance was obtained prior to the study [Ref.No.14/TSRMMCH&RC/ME-1/2020-IEC No: 007 dated 31.03.2020]. Oral telephonic consent was obtained from the participants to conduct interview and record the conversation. Interviews were conducted in local language (Tamil) which lasted for about 45 to 50 minutes. A total of 28 individuals were contacted of which, three didn't respond to the call and two had network issues due to which they were excluded. The researcher involved in analysis, communicated the data saturation to other researchers (PT and KH) and data collection was ended with 23 interviews, which were included in the analysis.

Data analysis: After each interview, verbatim transcription of audio recording was done and translated into English by two researchers (PT and KH) involved in data collection. Following which third researcher (SK) was involved in back translation of contents to Tamil and verified the same with original transcript. Whenever any discrepancy of content was identified, another expert language translator was consulted. Explication of data was done in five steps.⁶ (1) Bracketing and phenomenological reduction. (2) Delineating units of meaning. (3) Clustering of units of meaning to form themes. (4) Summarizing each interview, validating it and where necessary modifying it. (5) Extracting general and unique themes from all interviews and making a composite summary.

Results

A total of 23 participants were interviewed to understand their perceived impact of lockdown. Demographic details of study participants are given in Table 1.

Table 1: Demographic details of study participants (N= 23)

Variables	Frequency	Percentage
Age (in years)		
18 - 25	6	26.0
26 - 40	13	56.6
41 - 60	4	17.4
Sex		
Male	8	34.8
Female	15	65.2
Marital status		
Married	19	82.6
Unmarried	4	17.4
Educational status		
Primary	2	8.7
Secondary	4	17.3
Higher	12	52.2
Graduate	5	21.8
Occupation		
Home maker	8	34.8
Student	4	17.4
Daily wage	5	21.7
Salaried job	4	17.4
Own business	2	8.7
Socio-economic status		
Upper	1	4.4
Middle	19	82.6
Lower	3	13.0
Family size		
1-2	3	13
2-4	13	56.5
>4	7	30.5

Analysis of qualitative data on impact of lockdown, resulted in two broad categories i.e. perceived positive and negative effects with five major themes each. Themes under negative impact of lockdown were (1) Financial (2) Familial (3) Nutritional (4) Psychological and (5) Educational

while those under positive impact were (1) Social support (2) Psychological (3) Behaviour change (4) Familial (5) Financial. Perceived negative impact had a total of 13 subthemes with 40 codes (Table 2) and positive impact had 13 subthemes with 22 codes (Table 3).

Perceived Negative impact

Theme 1: Financial

Most common negative impact perceived by many was financial issue. Four subthemes were identified i.e. financial hardship, difficulty in access to money, increase in expenses and debts. All participants agreed to deficit of money for fulfilling daily needs. At present financial issues were considered to be manageable by majority and will be difficult if the lockdown gets extended.

“There is little bit of financial issues now. But if lockdown extends for long time it will be an issue. We are adjusting with what we have.” 23 years, female, homemaker.

Many faced difficulty in withdrawing money from bank/ATM. Those living in outskirts expressed concerns on non-availability of transport to reach banking facilities.

“It is difficult without bus facilities to travel. I am not able to go to bank to take money.” 55 years, male, married.

Few mentioned that cost of daily essentials had increased and they could not afford it. They also felt more money had to be spent because they had to buy groceries in bulk so that it can be used during lockdown. Some had to borrow money to sustain living.

“We do not have money to spend. I have kept my gold on loan and got some money.” 42 years, female, married.

Theme 2: Familial

Most of the women stated increase in workload. They had to walk long distance in the absence of public transport to purchase daily essentials. Some

also expressed extra effort in looking after their children.

“Normally we cook only once and take the same food for lunch but now since we all are at home we have to cook three meals. Extra meal.... extra work and double the expense than usual.” 32 years, female, married.

Verbal and physical conflicts among couples and kids have increased in some houses due to staying indoor for longer duration. Most of these arguments were because of their spouse not assisting in household chores.

“...I do have lot of verbal fight with my spouse these days. It’s mainly because I ask him to help me in household works as he simply sits and watch TV the whole day.” 28 years, female, married.

Theme 3: Nutritional

Non- availability of food especially perishable ones and price inflation were concerns to many and few have decreased their intake of food to save for later use.

“We are just eating with what we have. We have to think about future, we can’t spend all our money on eating.” 39 female, married.

Many were forced to modify their routine diet due to various reasons such as stopping non-vegetarian food due to closure of shops, fear of acquiring COVID while waiting at meat shop.

“My husband likes to eats non-veg but he has totally stopped eating that because it’s not available easily. Moreover I don’t want him to wait at meat stall to buy it.....” 23 female, married.

Theme 4: Psychological

Most of the participants expressed stress due to staying home the whole day, change in daily routine, not able to go to work, not able to meet their family members and acquiring COVID-19 infection on going out during lockdown. Some felt anxious due to repeated information regarding COVID-19 on news channels.

“.....every time when I watch TV they are talking about this..... mind is constantly thinking about this which makes me stressed” 33, male, married.

Some of the mothers feared about their kids acquiring COVID and spending lot of time watching TV.

“... Since we have kids we have more fear whether they will get CORONA. I am worried about their safety.” 36 years, female, married.

Theme 5: Educational

Participants with school/college going students felt closure of school as a major impact of lockdown. There was uncertainty in opening of educational institutions.

“My daughter’s exam has been postponed. She is bored studying without knowing whether her exam will be held or not?” 42 years, male, married.

Several issues were raised regarding online teaching such as availability of internet, adapting to online mode of teaching, increased workload in assisting children during virtual classes and their homework. Some felt students might lose their competency in reading and writing skills if online teaching is prolonged.

“Oh these online classes is another problem, we don’t get good internet connection from our house, my kid has to sit outside the house.....” 27 years, female, married

Perceived Positive impact

Theme 1: Social support

Many told that lockdown has forced them to stay at home which resulted in increased socialization among people in their neighborhood. Most of the participants felt that many individuals had become more generous in donating basic needs especially food to the needy. Few were satisfied with monetary benefits and ration goods provided by public sector.

Table 2: Perceived negative impacts of lockdown by study participants

Themes	Sub themes	Codes
Financial	Financial hardship	Loss of job and income
		Uncertainty in getting salary
	Difficulty in access to money	Closure of bank
		Non availability of money at ATM
		No transport to reach banking facility
	Increase in expenses	Inflating price of essential goods
		Stockpiling of groceries
	Debts	Borrow money from relatives/friends
		Taken loan
		Inability to pay debts/EMI
Familial	Conflicts	Conflicts and arguments between couple
	Workload	Overburdened due to additional cooking
		Caretaking of restless kids
		Additional efforts to keep kids engaged
		Walk long distance to procure essentials
Nutritional	Food availability	Food shortage at family
		Vegetables not accessible
	Modification of diet habits	Switchover from non-vegetarian to vegetarian
		Surviving on available food items
		Increase in food consumption
Psychological	Stress	Social isolation
		Change in daily routine
		Not able to go for work
		Extension of lockdown
		Uncertainty in disease spread after lockdown relaxation
		Fear of acquiring COVID
		Unknown nature of COVID virus
		Repeated media information on COVID
	Worry	Increase in screen time for kids
		Safety of kids
		Apprehension about future financial problems
		Irresponsible public behaviour
		Not able to meet kins
	Boredom	Simply sitting at home
Educational	Disruption in education	Uncertainty in opening of schools/colleges
		Uncertainty in exam
	Remote learning	Difficulty in internet access
		Increase in workload due to online teaching
		Difficult to handle online classes
		Change in reading and writing habit

“We do socialize with neighbours; in fact we have increased our relationship with them during this lockdown, since they are at home the whole day.”
 23 years, female, unmarried

Theme 2: Psychological

Some felt happy with this lockdown as it gave them time to relax, rediscover themselves and spend

more time with family members, got time to enjoy leisure time and also get connected to extended family and friends. Few stated being secure and safe staying indoors during lockdown.

“Good thing is we are all spending more time with our family and we are happy about that. We have never spent so much time like this before..” 25 years, female, married.

Table 3: Perceived positive impacts of lockdown by study participants

Social support	<i>Socialization</i>	<i>Increase in socialization with neighbours</i>
		<i>Decreased in conflict with neighbours</i>
Psychological	<i>Generosity</i>	<i>Support for basic needs</i>
	<i>Happiness</i>	<i>Fun being with family</i>
		<i>More relaxed with leisure time</i>
		<i>Spend time with family</i>
	<i>Compassion</i>	<i>Concern about daily wagers</i>
	<i>Bonding</i>	<i>Increase in family communication</i>
		<i>Connectedness with extended family members</i>
		<i>Couple intimacy</i>
<i>Positive thinking</i>	<i>Children are safe at home</i>	
	<i>Rediscover oneself</i>	
<i>Mindfulness</i>	<i>Safe at home from acquiring COVID</i>	
Behaviour change	<i>Diet</i>	<i>Reduced intake of outside food/non vegetarian</i>
		<i>Increase consumption of greens</i>
	<i>Personal</i>	<i>Abstinence from alcohol use</i>
<i>Improved personal hygiene</i>		
Family	<i>Goal</i>	<i>Prepare future plans</i>
	<i>Support</i>	<i>Helping in household chores</i>
Financial	<i>Low expenditure</i>	<i>Less spending on recreation</i>
	<i>Investment</i>	<i>Decision to save money for future</i>
		<i>Plan to invest in health insurance</i>

Theme 3: Behaviour change

Many felt this lockdown has brought about behaviour changes in their daily diet which they perceived as better. They have decreased eating food from outside and eat only home cooked food, some also stated increased consumption of green leafy vegetables.

“Moreover many shops have been closed down and we have to eat what we cook at home..we choose healthier choices” 42 years, female, married.

Participants also felt that they have improved their personal hygiene more than before. They constantly

wash their hands and take bath immediately after coming from outside. Lockdown had forced them to keep their house and surrounding clean.

“After I come from outside I wash my leg and hands properly. Before I was not so cautious but now with the lockdown and COVID-19 I don't want to take any risk.” 25 years, female, married.

Theme 4: Familial

Some said this lockdown has given them time to think about their future plan. Few had expressed satisfaction in supporting their spouse in daily household chores. Getting to be together and

spending more time with family member itself was considered to a positive effect of lockdown.

“...since I’m at home, I’m spending more time with kids and I feel happy about it. I’m also able to help in doing household chores like cooking which is helpful for my wife.” 29 years, male, married

Theme 5: Financial

Few participants felt that lockdown has made them spend less especially for leisure activities and shopping, which has increased their saving. Very few have decided to invest in health insurance which is perceived as positive future investment.

“This lockdown made me realize the importance of savings for our health needs. We have recently got our health insurance done” 42 years, female, married

Discussion

Several studies have been done to identify the experience of different population groups due to the COVID pandemic in general. Only few studies have focused on finding the impact of lockdown and most of these studies focused only on psychological aspects. There are much more factors that’s needs to be explored. In the present study we explored all aspects of unintended consequences of COVID-19 pandemic lockdown which was implemented to reduce the transmission of the disease. The results of the study revealed that the lockdown had both positive and negatives impacts among the participants.

Negative impacts

Negative aspects include financial, familial, psychological, nutritional and educational impact. Financial aspects include loss of income, increase in expenses and difficulty in accessing money. Non availability of money due to closure of bank was reported in a study done in Odisha, India.⁷

Financial crisis was also reported by Rohail in his study in Pakistan and another study from Spain.^{8,9} Concern about increase in price of food items were expressed by few participants in a study done in England.¹⁰ Participants experienced conflicts and arguments with the family members and also increased workload due to additional cooking, more care taking burden since their kids are at home and

walk long distance to procure essential items because it was not available at their door step due to closure of many shops. Increase in family chores were reported in a study done in Pakistan.⁸ Some had to borrow money or take loan to manage their financial problem. In our study participants expressed problems related to non availability of essential goods. Similar concerns were expressed in another study done by Bauza et al.⁹ Due to lockdown some of the participants anticipated food shortage in their family which made them to reduce food intake and survive on food items available at household without spending to buy additional goods. Similar findings were reported by a study done in South Africa.¹¹ In order to follow social distancing many of the participants reduced their social interaction with neighbours resulting in sense of being isolated from others. A study by McKinlay et al also reported social isolation among the study group.¹² In our study we found that participants were stressed due to change in daily routine, inability to go for work, fear of acquiring COVID, unknown nature of disease and uncertainty in its spread. They were worried about safety of kids, financial problems and irresponsible public behavior. They were also bored sitting at home. Salarvand et al, Bauza et al and Rohail reported anxiety, loneliness, anger, depression, boredom, irritation, laziness among participants.^{7,8,13,14} Another study done in UK also reported presence of loneliness and apprehension about future of COVID after lifting lockdown.¹² Bel et al reported presence of fear due to COVID, economic uncertainty, isolation between family members among participants.⁹ Participants of our study also reported that they were worried being not able to meet their kins. Changes in routine and sense of immobility were observed by Procentese et al in Italy.¹⁵ Salarvand et al also reported internet abuse which is not present in our study which could be because the study was done during initial period of lockdown when online sessions were initiated only by few institutions.¹³ Czymara et al found that participants experienced difficulty in handling both work and children.¹⁶ Our study participants had issues related to their kids education mainly due to disruption in education, difficulty in internet access and additional workload due to online teaching and works. Difficulties in supporting their children in school related activities and internet access were

reported by studies in South Africa and Germany.^{11,16} Difficulty in remote learning was expressed by individuals participated in a study conducted in UK.¹²

Positive impacts

Positive impacts experienced by participants were increase in socialization with neighbours and decrease in conflict with them and there was increase in helping hands by providing basic needs to others. Participants of a research study in Spain also experienced growing empathy during lockdown.⁹ Our study participants experienced bonding among family members, feeling of happiness, increase in compassion, positive thinking and mindfulness. Increase in couple intimacy was reported by participants of a study done in Spain.⁹ In their study, Salarvand et al found that participants experienced sense of cooperation and help.¹³ Some of them considered reduced intake of outside food and increase in intake of greens as a positive impact on their health behaviour. Few male participants reported change in their household work behaviour by supporting their spouse in doing daily chores. Some changed their behaviour investing in health care and future needs by reducing their recreation expenditure.

Conclusions and Recommendations

The participants of the present study had mixed experiences during COVID lockdown. Majority stated negative impact related to job insecurity, financial hardship, inability to meet daily needs and psychological effects. While positive aspects like family bonding, better socialization, healthy dietary and hygienic practices were reported by some. Study findings reflect the short term experiences of the individual residing in rural area during the initial phase COVID lockdown and the long term impacts need to be explored.

Public health implications

The study findings suggest the need for policy makers to focus on price hike of essential commodities and job security in addition to providing financial support while implementing lockdown. The study results reflect the need for implementing emotional and psychological support measures such as counseling, helpline, support groups through online/social media and engaging in

meaningful activities to prevent mental health issues. Early planning by educational institutions to provide uninterrupted teaching for students should also be focused.

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Ethical considerations: The study was approved by the institutional ethics committee of Trichy SRM Medical College Hospital and Research Centre [Ref.No.14/TSRMMCH&RC/ME-1/2020-IEC No: 007 dated 31.03.2020]. Since the study was conducted during lockdown, oral telephonic consent was obtained from the participants to conduct interview and record the conversation.

Author contribution: The study was conceptualized by Dr PT., Data collection was done by Dr PT., and Dr KH., Data analysis was done by Author SK., Dr PT., KH., interpreted the data. The manuscript was prepared, reviewed and approved by all 3 authors (PT, HK and SK).

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