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"PERCEPTION OF INDIAN CITIZENS ABOUT LOCKDOWN AND COPING STRATEGY DURING COVID-19 PANDEMIC IN URBAN AND RURAL AREAS OF AMRAVATI DISTRICT OF MAHARASHTRA, INDIA"

Dr. Vinod R Wasnik	Professor, Department of Community Medicine, Dr. PDMMC, Amravati, Maharashtra, India.
Dr. Ajay K. Jawarkar	Professor and Head, Department of Community Medicine, Dr. PDMMC, Amravati, Maharashtra, India.
Dr. Priya A. Warbhe*	Associate Professor, Department of Community Medicine, Dr. PDMMC, Amravati, Maharashtra, India. *Corresponding Author
Dr. Vitthal D. Khanande	Assistant Professor, Department of Community Medicine, Dr. PDMMC, Amravati, Maharashtra, India.
Dr. Vishal Avchare	Post Graduate Student, Department of Community Medicine, Dr. PDMMC, Amravati, Maharashtra, India.

ABSTRACT **Background:** With COVID-19 pandemic spreading, India implemented a countywide lockdown on 25 March 2020,with only stores of necessary and basic amenities such as supermarkets and pharmaciesallowed to function. Apart from provoking massive health uproar, this pandemic also seems to have created aneconomic, mental, and social effect on the masses. Social distancing measures, quarantine, shutting down of educationalinstitutions, and self-isolation have a detrimental impact on people's psychology due toincreased loneliness, distrust, and reduced social interaction. The lockdown enforcement imposed restrictions on people's rights by refraining them from normal day-to-day activities; its usefulness remains a subject of debate. In this study we have focused on the likely impacts of lockdown in rural and urban areas of Amravati district of Maharashtra, India. **Methods:** Cross sectional, descriptive and comparative study was carried out in urban and rural area of Amravati city to assess perceptionsof Indian citizens about lockdown strategy during covid-19 pandemic. **Results:** Increase in stress was found in 99% participants from urban area & 79% from rural area, business stopped partially for 26% participants in urban area & 60% in rural area, business stopped completelyfor 6% participants in urban area & 3% in rural area,Job was lostfor 12% participants in urban area & 5% in rural area.There was negative impact of lockdown among study participants in urban and rural area. The difference was found to be statistically significant. ($p<0.05$) & in most cases it was highly significant ($p<0.001$). Positive aspect of lockdown participants were found doing Yoga (25%) in urban area & (10%) in rural area. Meditationwas followed by 22% participants in urban area & 8% in rural area. Exerciseduring lockdown was started by 39% participants in urban area & 23% in rural area. **Conclusions:** Lockdown restricting freedom of movement and social contacts appears to have caused significant disruption to many areas of life. Increase in stress, job lost, business stopped. Positive impact of lockdown was also registered, Participants were found engaging in Yoga, Meditation and Exercise during lockdown by participants both from urban and rural area. Listening to music, learning dancing and cooking was also noted from participants from urban and rural areas.

KEYWORDS : COVID-19, Lockdown, Urban- Rural , Perception

INTRODUCTION

The first documented proof of Novel Coronavirus or COVID-19 was reported in Wuhan city in the Hubei province in China on 31 December 2019. The number of cases began increasing at an alarming pace and a Public Health Emergency of International Concern was declared on 30 January 2020 to tacklethis issue. It created a massive uproar while significantly affecting the health of people.[1] InIndia, Kerala marked the first case of Coronavirus in January 2020 with a patient, who had atravel history from Wuhan.

Taking account of its escalation intensity and area of influence, on 11 March theWHO declared it a pandemic.[2,3] To avoid the devastating effect COVID-19 had on Western countries andconsidering the vast population, India implemented a countywide lockdown on 25 March,with only stores of necessary and basic amenities such as supermarkets and pharmaciesallowed to function. Apart from provoking massive health uproar, this pandemic also seems to have created aneconomic, mental, and social effect on the masses. A reduction in the supply chaincreates a scarcity of food, resources, and personal protective equipment. It leads to a financial strain on society and an imbalance of the economy, especially ina country like India. This expectedly, in turn creates unrest and a general sense ofhelplessness.

Social distancing measures, quarantine, shutting down of educationalinstitutions, and self-isolation have a detrimental impact on people's psychology due toincreased loneliness, distrust, and reduced social interaction.[4]The lockdown enforcement imposed restrictions on people's rights by refraining them from normal day-to-day activities, its usefulness remains a subject of debate. Thus, it will be useful and timely to understand the specific public perception, activities, and attitudes during the lockdown so governments and policymakers can regulate, recommend, and take necessary steps to avoid any undesired outcome and fulfill their basic needs.[5]

Further, the progression of COVID-19 from urban to rural areas, the strict lockdown measures, and the associated economic shocks are likely to impede efforts to address other health scourges in India such as diabetes, hypertension, and cardiovascular diseases. During the lockdowns, many health facilities were functioning sub-optimally or were converted to COVID facilities and provided only essential and emergency services. Measures to address coronavirus spread including lockdowns may have serious economic consequences and unintended effect of exacerbating rather than mitigating health disparities.[6,7,8]

To date, there are very limited studies that have been executed in India regarding people's attitudes or perceptions across socio-demographic conditions during a countrywide lockdown. Estimates by the Centre for Monitoring Indian Economy show that unemployment shot up from 8.4% in mid-March to 23% in the first week of April.

In urban areas, unemployment soared to 30.9% as of April 5. The shutdown caused untold misery for informal workers and the poor, who lead precarious lives facing hunger and malnutrition. So in this context we have focused on the likely impacts of lockdown in rural and urban areas of Amravati district of Maharashtra, India.

OBJECTIVES:

1. To know the perceptionsof Indian citizens about lockdown strategy during covid-19 pandemic in urban and rural areas.
2. To suggest the recommendation based on study findings.

MATERIALS AND METHOD

Study Setting:-

Study was carried out in urban health training centre, Belpura and Rural health training centre, NerPinglai.

Study Design:-

Cross sectional, descriptive and comparative study

Sample Size And Sampling Method: -

No prior similar study focusing on the perceptions about lockdown amidstthe COVID-19 pandemic was available in India, we made thebest assumption (p) for the present study as 50%. Assuming a 25% non-response rate, a sample size of 512 participants was estimated. We planned total sample to be enrolled as 256 from urban area and 256 from rural area.

Study Period:-

The duration was from December 2020 to April 2021.
Inclusion criteria:-

- Aged 18 years or older
- Willing to participate after giving written informed consent

Research Tool

Data was collectedby face to face interview of the respondents by using interviewer administered questionnaire. Pretested, Validated questionnaire was used.

Ethical Consideration And Confidentiality

This study was initiated after approval from the institutional ethical committee and permissions from the school authorities. Written consent from the participants were obtained after explaining the objectives of the study.

Statistical Analysis

Data was entered into MS excel. Based on the questionnaire, proportions and percentages were calculated for qualitative data.

RESULTS

Total 512 participants were enrolled in study. Their mean age was 41.88 years (SD ±15.5) and their ages ranged from 18 to 81 years. The majority of the participants were males (54.9%), 74.8% wereHindu by religion and 32% participants had highersecondary education (10 to 12 grades). Occupation of participants revealed 31.1% were farmers, 19.9% were housewife, 19.1% were laborer, 5.9% were doing business and 8.5% were had Service.(Table-1).

Table 1 - Demographic Profile Of The Study Participants.

Variables	Frequency n =512	Percentage
Area		
Urban	256	50
Rural	256	50
Age in Years		
18-36	215	42.1
37-54	167	32.7
55 and above	129	25.2
Gender		
Male	281	54.9
Female	231	45.1
Religion		
Hindu	383	74.8
Muslim	11	2.2
Others (Buddhist & Christian)	118	23.1
Educational status		
Illiterate	17	3.3
Primary	98	19
Middle	123	24
Secondary	164	32
College and above	110	21.7
Occupation		
Not any	64	12.5
Farmer	159	31.1
Housewife	102	19.9
laborer	98	19.1
Business	30	5.9
Service	44	8.6
Others	15	2.9

Table 2: Perceptions towards lockdown strategy among study participants

Perceptions towards lockdown strategy among study participants	Urban n=256	Rural n =256	p
Increase in stress	253 (99)	202 (79)	<0.001**
Business stopped partially	67 (26)	153 (60)	<0.001**
Business stopped completely	15 (6)	7(3)	>0.05(NS)
Job was lost	30 (12)	13(5)	<0.001
Workout problem	192(75)	227 (89)	<0.001**
Increase in office work from home	77 (30)	13 (5)	<0.05*
Increase in boredom	102 (40)	38(15)	<0.001**
Increased use of TV / mobile / social media	228 (89)	199(78)	<0.001**
Difficulty in getting groceries / vegetables / fruits/daily needs items	189 (74)	25 (10)	<0.001**
Difficulty in getting hospital services other than covid-19	143 (56)	204 (80)	<0.001**
Difficulty in getting medications	199(78)	128 (50)	<0.001**
Increased irritability in children	184(72)	52 (20)	<0.001**
Increased Discomfort due to non-availability of alcohol / cigarettes/no social contact/could not attend social function	74 (29)	102 (40)	<0.05*

Table 2 reveals the perception of lockdown strategies among participants. Increase in stresswas found in 99% participants from urban area &79% from rural area, business stopped partiallyfor 26%participants in urban area &60% in rural area, business stopped completelyfor 6% participants in urban area &3% in rural area,Job was lostfor 12% participants in urban area &5% in rural area. Workout problem was stated by 75% participants from urban area & 89% in rural area. Increase in office work from homewas stated by 30% in urban area &5% in rural area. Increase boredomwas stated by 40% participants from urban area &15%from rural area. Increased use of TV / mobile / social mediawas registered by 89% participants from urban area & 78% participants from rural area,Difficulty in getting groceries / vegetables / fruits/daily needs itemswas noted by 74% participants from urban area & 10% from rural area. There was difficulty in getting hospital services other than covid-19for 56% participants of urban area &80% participants from rural area. Difficulty in getting medicationswas observed by 78% participants from urban area & 50% from rural area. Increased irritability of childrenwas experienced by 72%participants from urban area & 20%participants from rural area. Increased discomfort due to non-availability of alcohol / cigarettes/no social contact/could not attend social functionin stated by 29% participants from urban area &40% in rural area. There was negative impact of lockdown among study participants in urban and rural area. The difference was found to be statistically significant. ($p<0.05$) & in most cases it was highly significant ($p<0.001$).

Table 3 - Positive changes experienced during Lockdown period

Positive changes experienced during Lockdown period	Urban n=256	Rural n =256	p
Yoga	64 (25)	25(10)	<0.001**
Meditation	56 (22)	33 (8)	<0.001**
Exercise	99 (39)	20 (23)	<0.001**
Music	176(69)	140 (55)	<0.001**
Dancing	31 (12)	5(2)	<0.001**
Cooking	98 (38)	42(16)	<0.001**
Watching TV/ Mobile	235 (92)	217(85)	<0.05*
Helping to needy person	30(12)	12(5)	<0.05*
Active use of multimedia/ Apps	204 (80)	140(55)	<0.001**
Increase in spending time with family members and with children	187 (73)	128 (50)	<0.001**
Other	19(7)	41(16)	<0.001**

Table -3 shows positive changes experienced by participants during lockdown. Participants were found doing Yoga (25%) in urban area & (10%) in rural area. Meditationwas followed by 22% participants in urban area &8% in rural area. Exerciseduring lockdown was started by 39% participants in urban area &23% in rural area. Listening to music, learning dancing and cooking was seen in 69%, 12% and 38% participants from urban area and 55%, 2% and 16% from rural area respectively. Watching TV/ Mobilewas stated by 92% participants from urban area & 85% from rural area, The study revealed 12 % respondents have participated in community activities such as

volunteering and helping the less privileged, during the same period in urban area &5% in rural area,Active use of multimedia/ Appswas stated by 80% participants from urban area & 55% participants from rural area. Total of 73% participants from urban area & 50% from rural areastated that they spent more time with family members and children.

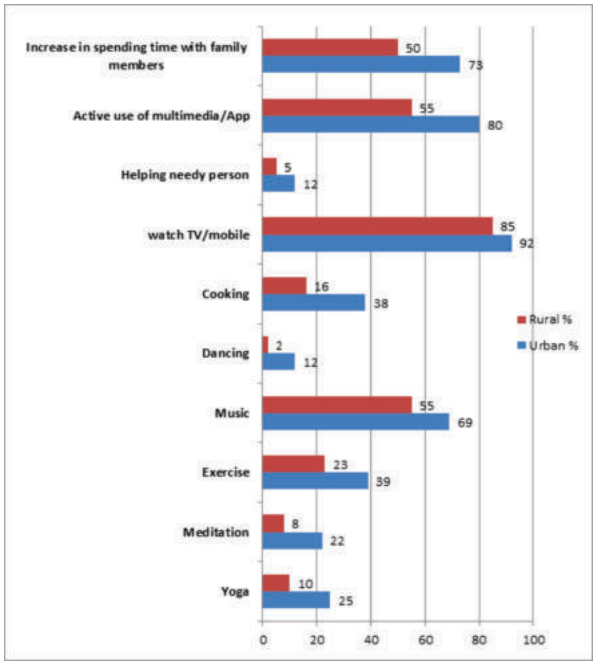

Figure 1:- Positive changes experienced during Lockdown period

DISCUSSION

Although lockdown was introduced as an urgent nationalmitigation strategy against COVID-19, our cross-sectional comparative study has shown the positive and negative impact of lockdown in India, especially comparing the rural and urban area.General characteristics of participants showed their mean age as 41.8 years (SD ±15.5) and age range from 18 to 81 years. The majority of the participants were males (54.9%), 74.8% were Hindu by religion and 32% participants had highersecondary education (10 to 12 grades). Occupation of participants revealed 31.1% were farmers, 19.9% were housewife, 19.1% were laborer, 5.9% were doing business and 8.5% were had Service(Table-1).

In present study it was found that increase in stresswas found in 99% participants from urban area & 79% from rural area, business stopped partially for 26% participants in urban area & 60% in rural area, business stopped completelyfor 6% participants in urban area & 3% in rural area,Job was lostfor 12% participants in urban area & 5% in rural area. Workout problem was stated by 75% participants from urban area & 89% in rural area. Increase in office work from home was stated by 30% in urban area & 5% in rural area. Increase boredom was stated by 40% participants from urban area & 15% from rural area. Increased use of TV / mobile / social mediawas registered by 89% participants from urban area & 78% participants from rural area,Difficulty in getting groceries / vegetables / fruits/daily needs itemswas noted by 74% participants from urban area & 10% from rural area. There was difficulty in getting hospital services other than covid-19for 56% participants of urban area & 80% participants from rural area. Difficulty in getting medications was observed by 78% participants from urban area & 50% from rural area. Increased irritability of childrenwas experienced by 72% participants from urban area & 20% participants from rural area. Increased discomfort due to non-availability of alcohol / cigarettes/no social contact/could not attend social function in stated by 29% participants from urban area & 40% in rural area. There was negative impact of lockdown among study participants in urban and rural area. The difference was found to be statistically significant. ($p<0.05$) & in most cases it was highly significant ($p<0.001$).

Verma and Mishra [9] in their survey during the first lockdown in India reported the prevalence of moderate to severe depression, anxiety and stress to be 25%, 28% and 11.6%, respectively.

Similar findings were found in study by Singh et al [10]Most participants faced financial difficulties during theCOVID-19 lockdowns. Several participants reported difficultygetting to work because of lack of public transportation. Some participants lost their jobs due tothe COVID-19 pandemic.Prominentpsychos ocial issues are expected among migrants for pandemicCOVID-19 and lockdown [11].

Additional directives for workplaces like work from home (WfH) were advised in India which is however suitable only for urban upper and middle-class people and is challenging for the rural agriculture-based population. Also, India still lacks places with the facility of computers andthe internet, and hence these WfH is a challenge[12]. The Indian IT industry with primarily call-centres and knowledge process outsourcing were not ready for the lockdown and WfH situation[13]. However, a 60% hike of Wi-Fi network equipment, e.g. routers and mobile hotspot dongles demand were observed in India during the COVID-19 lockdown and WfH scenario causing a little boost up to the telecom industry.

The lockdown measures adopted have been fundamental to reduce the outbreak of the virus, they had a high psychological cost for the population that should be noted.[14]These includes anxiety, depression, distress, sleep disorders and post-traumatic stress disorders. The five main causes of psychological distress during the lockdown are identified as duration of lockdown, fear of infections, feelings of frustration and boredom, inadequate supplies and inadequate information.[15]

The present study showed some positive impact of lockdown on respondents, Participants were found doing Yoga (25%) in urban area & (10%) in rural area. Meditationwas followed by 22% participants in urban area & 8% in rural area. Exerciseduring lockdown was started by 39% participants in urban area & 23% in rural area. Listening to music, learning dancing and cooking was seen in 69%, 12% and 38% participants from urban area and 55%, 2% and 16% from rural area respectively. Watching TV/ Mobilewas stated by 92% participants from urban area & 85% from rural area.Our study revealed 12 % respondents have participated in community activities such as volunteering and helping the less privileged, during the same period in urban area & 5% in rural area,Active use of multimedia/ Appswas stated by 80% participants from urban area & 55% participants from rural area. Total of 73% participants from urban area & 50% from rural areastated that they spent more time with family members and children.

CONCLUSIONS

Lockdown restricting freedom of movement and social contacts appears to have caused significant disruption to many areas of life. Increase in stress, job lost, business stopped partially and completely was reported by participants from urban and rural area.Increase in work from home was reported by few participants from both the areas.Increased use of TV / mobile / social mediawas registered by most of the participants from urban and rural area.Most of the participants reported difficulty in getting hospital services other than covid-19from both areas.

There was negative impact of lockdown among study participants in urban and rural area. The difference was found to be statistically significant. ($p<0.05$) & in most cases it was highly significant ($p<0.001$).

Positive impact of lockdown was also registered, Participants were found engaging in Yoga ,Meditation and Exercise during lockdown by participants both from urban and rural area. Listening to music, learning dancing and cooking was also noted from participants from urban and rural areas. Our study revealed some respondents participated in community activities such as volunteering and helping the less privileged. Active use of multimedia/ Appswas reported by participants from urban area & rural area. Participants also reported spending more time with family members and childrenfrom urban area & rural areas

RECOMMENDATIONS

Social distancing, isolation and economic loss during lockdown increased risk of psychological problems implying the need for professional counseling

Planning policies and generating guidelines that can improve the

physical as well as psychological health of public and expanding mental health services to everyone in society is needed.

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