A DATASET OF BEHAVIOUR OF PEOPLE DURING COVID-19 PANDEMIC IN A WELL DEVELOPING CITY, TAMIL NADU, INDIA

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Abstract: A dataset of human behaviour during the pandemic situation has been well analysed and reported in this paper. The nature of human behaviour has been dangerous due to high influencing of COVID-19 pandemic situation. This data set clearly describes the expectation of individuals, various communities, and necessity of the lockdown restriction based on the daily new Covid positive cases. It helps to analyse the behavioural response, social, individual expectations and health issues throughout the course of the pandemic period. The result of the present study clearly demonstrates that lockdown restriction highly helps to control the spread of the diseases, and the collective behaviour of humans in the initial period of pandemics depends on basic essential things for their day-to-day life. The dataset revealed that, behaviour of people and their needs has been changed and higher percentage of peoples are willing to go back their business and job to survive in the society against COVID-19.

***Keywords*: Covid-19, Pandemic Situation, Social distance, Human Behaviour**

1. Introduction

Specifications Table

Subject Needs and behaviour of Human, Diseases Transmittable

Specific subject area Basic Needs, Job willings, Human well being and Disease spread

Type of data Tables, Figures

How data were acquired Data gathered from the Ministry of health and family welfare (Govt. of India)

Data format Raw, Analyzed beahaviour of people

Description of data collection The data were collected during the month of March to June 2020

Data source location Tamilnadu, India

Data accessibility This article contains all the dataset

Value of the Data

The dataset provides information on the daily positive cases, speed of disease spread through community of peoples in Tamil Nadu.

The data are helps to analyze the impact of COVID-19 in urban and rural areas

This dataset is unique to provide the basic needs of peoples and the way to survival of human in the society to against COVID-19

Researchers can utilize the dataset to analyze the behavior of peoples during the pandemic situation

2. Data description

Covid-19 is a most dangerous and easily spread virus in the living community. The effects of the virus are very dangerous and reported by [1,2,3]. Tamil Nadu is a one of the most rapid developing state in the way of industrialized, highly densified population in India. It had clocked during the pandemic situation and results that, reducing the economic growth rate of the state. A Tamil Nadu government has answered to the outbreak by subsequent a contact- tracing, testing and surveillance model. More than 85 laboratories have been announced as COVID testing center by Indian council of medical research (ICMR). The first case of the COVID-19 was reported on 7th March 2020. Currently Tamil Nadu has secured the second place in highest positive cases in India [4]. Since 25th March, the first lock down has adhered to more restriction for public transport, industrial activities, vehicle movements and allowed only for medical and basic amenities centers. The restriction and relaxation during the different Lock Down (LD) and Un Lock Down (ULD) period were presented in the Table.1. The LD-1 and LD-2 has followed from 25th March to 3rd May 2020 and strictly followed to restrict the public transport, vehicle movements and industrial activities. The result of the before lockdown, LD-1 and LD-2 shows that, Covid positives cases are recorded as increasing an average rate of 100 cases per day and total numbers of death was 44 (Table.2, 3 and 4). During the LD-3 and LD-4 result shows that, average increase in positive

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cases are 84 and 560 respectively and the total death are 18 and 45 respectively (Table.5 and 6). After the month of May, government announced Un Lock down with some restriction such as public transport, government sectors and industries are run with partial number of workers. During the ULD-1 and 2, the Covid cases are the registered average of 1750 and 4500 cases, the total death was recorded as 981 and 2697 respectively. From the dataset, the higher number of deaths was recorded during the ULD-1 and ULD-2.

Table.1 Covid-19 pandemic lockdown schedule in Tamil Nadu, India

Stages	Period	No. ofdays	Public Transport	Vehicle Movement	Industrial Activities
LD-1	25th March to 14th April 2020	21	×	×	×
LD-2	15th April to 3rd May 2020	19	×	×	×
LD-3	4th May to 17th May 2020	14	×	✓	✓*
LD-4	18th May to 31st May 2020	13	×	✓	✓*
ULD-1	1st June to 30th June 2020	30	×	✓	✓*
ULD-2	1st July to 31 July 2020	31	×	✓	✓*

× - Restriction, ✓ - Relaxation, * - Partial Worker

Table.2 Covid Positive, recovered death cases during before lock down

Date	Recovered	Death	New Cases
07-03-2020	0	0	1
08-03-2020	0	0	0
09-03-2020	0	0	0
10-03-2020	0	0	0
11-03-2020	0	0	0
12-03-2020	0	0	0
13-03-2020	0	0	0
14-03-2020	0	0	0
15-03-2020	0	0	0
16-03-2020	0	0	0
17-03-2020	0	0	0
18-03-2020	0	0	0
19-03-2020	1	0	1
20-03-2020	0	0	1
21-03-2020	0	0	0
22-03-2020	0	0	4
23-03-2020	0	0	2
24-03-2020	0	0	6

Table.3 Covid Positive, recovered death cases during Lock down-1 (LD1)

Date	Recovered	Death	New Cases
25-03-2020	0	0	3
26-03-2020	0	1	8
27-03-2020	0	0	3
28-03-2020	1	0	11
29-03-2020	2	0	9
30-03-2020	0	0	18
31-03-2020	0	0	7
01-04-2020	2	0	160
02-04-2020	0	0	0
03-04-2020	0	0	75
04-04-2020	0	1	102
05-04-2020	0	1	74
06-04-2020	2	2	86
07-04-2020	0	0	50
08-04-2020	11	2	69
09-04-2020	2	1	48
10-04-2020	0	0	96
11-04-2020	23	0	77
12-04-2020	0	2	58
13-04-2020	6	1	106
14-04-2020	8	0	98

Table.4 Covid Positive, recovered death cases during Lock down-2 (LD2)

Date	Recovered	Death	New Cases
15-04-2020	23	1	31
16-04-2020	37	2	38
17-04-2020	62	1	25
18-04-2020	103	0	56
19-04-2020	82	0	49
20-04-2020	46	0	105
21-04-2020	46	2	43
22-04-2020	178	1	76
23-04-2020	27	0	33
24-04-2020	90	2	54
25-04-2020	114	2	72
26-04-2020	94	1	66
27-04-2020	60	1	64
28-04-2020	81	0	52
29-04-2020	67	1	121
30-04-2020	42	2	104
01-05-2020	48	0	161
02-05-2020	54	1	203
03-05-2020	29	1	231

Table.5 Covid Positive, recovered death cases during Lock down-3 (LD3)

Date	Recovered	Death	New Cases
04-05-2020	38	1	266
05-05-2020	30	1	527
06-05-2020	76	2	508
07-05-2020	31	2	771
08-05-2020	31	2	580
09-05-2020	58	3	600
10-05-2020	219	4	526
11-05-2020	135	3	669
12-05-2020	92	6	798
13-05-2020	83	8	716
14-05-2020	42	3	509
15-05-2020	64	2	447
16-05-2020	359	5	434
17-05-2020	939	3	477

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Table.6 Covid Positive, recovered death cases during Lock down-4 (LD4)

Date	Recovered	Death	New Cases
18-05-2020	634	4	639
19-05-2020	234	3	536
20-05-2020	489	3	688
21-05-2020	987	3	743
22-05-2020	400	7	776
23-05-2020	846	4	786
24-05-2020	363	5	759
25-05-2020	833	8	765
26-05-2020	407	7	805
27-05-2020	611	9	646
28-05-2020	567	6	817
29-05-2020	639	12	827
30-05-2020	765	9	874

Table.7 Covid Positive, recovered death cases during Unlock down-1 (ULD1)

Date	Recovered	Death	New Cases
01-06-2020	757	13	1149
02-06-2020	413	11	1162
03-06-2020	536	13	1091
04-06-2020	610	11	1286
05-06-2020	586	12	1384
06-06-2020	860	12	1438
07-06-2020	633	19	1458
08-06-2020	604	18	1515
09-06-2020	528	17	1562
10-06-2020	798	21	1685
11-06-2020	1008	19	1927
12-06-2020	1372	23	1875
13-06-2020	1342	18	1982
14-06-2020	1362	30	1989
15-06-2020	1138	38	1974
16-06-2020	797	44	1843
17-06-2020	1438	49	1515
18-06-2020	842	48	2174
19-06-2020	1017	49	2141
20-06-2020	1630	41	2115
21-06-2020	1045	38	2396
22-06-2020	1438	53	2532
23-06-2020	1358	37	2710
24-06-2020	1227	39	2516
25-06-2020	2424	33	2865
26-06-2020	2236	45	3509
27-06-2020	1358	46	3645
28-06-2020	2737	68	3713
29-06-2020	1443	54	3940
30-06-2020	2212	62	3949

Table.8 Covid Positive, recovered death cases during Unlock down-2 (ULD2)

Date	Recovered	Death	New Cases
01-07-2020	2325	60	3943
02-07-2020	2852	63	3882
03-07-2020	3095	57	4343
04-07-2020	2357	64	4329
05-07-2020	2214	65	4280
06-07-2020	2186	60	4150
07-07-2020	3793	61	3827
08-07-2020	4545	65	3616
09-07-2020	3051	64	3756
10-07-2020	3994	65	4231
11-07-2020	4163	64	3680
12-07-2020	3591	69	3965
13-07-2020	3617	68	4244
14-07-2020	3035	66	4328
15-07-2020	4743	67	4526
16-07-2020	5000	68	4496
17-07-2020	5106	69	4549
18-07-2020	3391	79	4538
19-07-2020	3049	88	4807
20-07-2020	4059	78	4979
21-07-2020	3861	70	4985
22-07-2020	4894	75	4965
23-07-2020	4913	518	5849
24-07-2020	5210	88	6472
25-07-2020	6504	88	6785
26-07-2020	7758	89	6988
27-07-2020	5471	85	6986
28-07-2020	5723	77	6993
29-07-2020	4707	88	6972
30-07-2020	5927	82	6426

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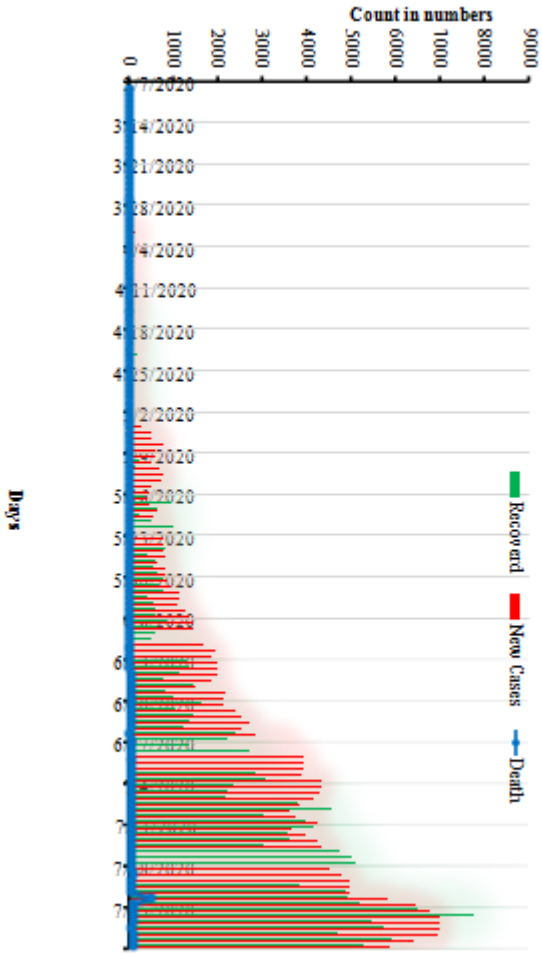

Fig.1 Variation of Covid cases during March to July 2020

The analysis of the Covid dataset helps to identify the present nature of the peoples and behavior of people living in the pandemic situation [5,6,7]. During the first curfew period (Table 9), 45 % of people said they only wanted to go to the pharmacy. Because at LD1 time people wanted to go out only for essential tasks because of the fear of the Covid19. During this period 25%, 10%, 10%, 4% and 6% of the population were interested in going to supermarkets, hospitals, banks, temples, and work, respectively. After the 21st day of the LD1, people have expressed their interest in going to the supermarket next to the pharmacy to alleviate the shortage of groceries in their homes during the next two and third (LD2 & LD3) curfews. In the same time the people's interest to go to temples has dropped significantly. During the LD4, ULD1 and ULD2 period 15%, 25%, and 19% of people respectively have expressed interest in going to work for their economic needs. According to Table 10 majority informal workers have expressed a desire to go to work regardless of COVID-19 fears due to their poverty during all covid-19 lockdown periods. It can be seen that their preference is 45%, 42%, 45%, 39%, 45% and 55% during the LD1, LD2, LD3, LD4, ULD1, and ULD2 period respectively. This preference decreased during the LD2, LD3 and LD4 as migrant workers migrated to their hometowns. And only 23%, 23%, 26%, 15% and 15% of people prefer to work from home during LD2, LD3, LD4, ULD1, and ULD2 curfews except during the LD1 (43%), which may have been due to the psychological stress of being at home. And with the exception of the LD1, most formal workers prefer to go to the office during LD2, LD3, LD4, ULD1, and ULD2.

3. Design, Materials and Methods

Table.9 Basic needs for human during the Pandemic situation

Phase	Pharmacy	Supermarket	Doctor	Bank	Temple	Job
LD-1	45	25	10	10	4	6
LD-2	36	34	15	12	1	2
LD-3	32	36	10	10	1	11
LD-4	35	26	10	12	2	15
ULD-1	30	20	12	12	1	25
ULD-2	35	25	10	10	1	19

Table.10 People willingness for job during the Pandemic situation

Phase	Work from Home	Work onsite	Non-organisationworkers
LD-1	43	12	45
LD-2	23	35	42
LD-3	23	32	45
LD-4	26	35	39
ULD-1	15	40	45
ULD-2	15	35	50

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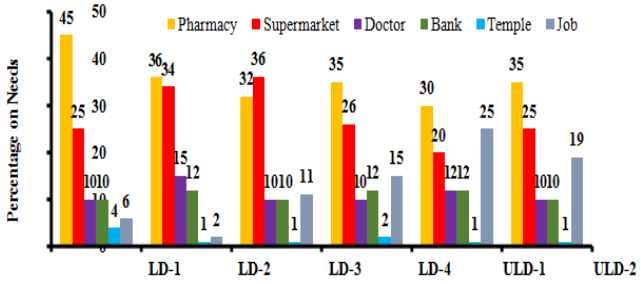

Fig.2 Percentage of people need during the pandemic situation

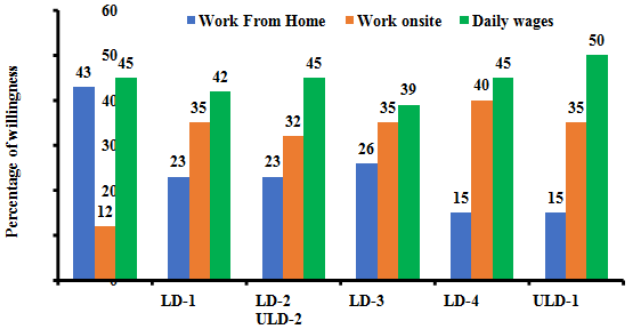

Fig.3 Change in percentage of people willingness during the pandemic situation

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