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Original Research Article

Some socio-demographic characteristics of cured patients of COVID-19 discharged from dedicated covid care center in metropolitan region

Ravindra Balaram Gurav*, Amit Yadav, Aishwarya Nair

Department of Community Medicine, Rajiv Gandhi Medical College, Kalwa, Thane, Maharashtra, India

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***Correspondence:**
Dr. Ravindra Balaram Gurav,
E-mail: drrbgurav65@gmail.com

ABSTRACT

Background: As per ICMR study in April 2020, around 30% of all the proven cases of COVID-19 were asymptomatic and various modeling studies had estimated that 40% of the transmission was by the asymptomatic patients. So, it was decided to isolate all such patients at dedicated covid care centers in order to stop the transmission of the corona virus.
Methods: This was a cross-sectional study conducted at a dedicated covid care center (DCCC) in a metropolitan region from 27 June, 2020 to 10 July, 2020. All the cured asymptomatic confirmed cases of COVID-19 discharged during above period of 14 days were included in the study.
Results: Total 352 cured asymptomatic COVID-19 patients were discharged from dedicated covid care center. Of these 352 subjects, 208 (59.09%) were males and 144 (40.91%) were females ($p<0.05$). 315 (89.49%) cured patients were in the age group of 18-60 years. 20 (05.68%) subjects were above 60 years of age. The mean and SD of the age of the subjects was 37.53 and 14.09 years respectively. The median age of the subjects was 35 years.
Conclusions: It is very important to identify the asymptomatic patients in the community and to study their socio-demographic characteristics as early as possible through active public health strategies like surveys, testing and tracing. Such cases of COVID-19 should be isolated in DCCC and managed on a priority basis in order to prevent and control the infection.

Keywords: COVID-19, DCCC, Metropolitan region, Socio-demography

INTRODUCTION

Since the origin of the novel severe acute respiratory syndrome corona virus-2 (SARS COV-2) from Wuhan city of China in 2019 and followed by the WHO declaring it as COVID-19 pandemic on 11th March 2020, the word is witnessing a major public health crisis through this pandemic in the form of loss of lives as well as social and economic crisis.[1] Ongoing pandemic of COVID-19 has resulted in millions of deaths globally. In India, the first reported case of COVID-19 came to light on 30th January 2020 in the state of Kerala and the person who became the first SARS COV-2 fatality i.e., on 10th March 2020, and death being reported on 12th March 2020, was from Karnataka with a travel history from Jeddah, Saudi Arabia on 29th February 2020. This patient had co-morbidities of diabetes, hypertension and bronchial asthma. He was named as superspreader as 27 of his contacts were found to be covid positive and more than forty thousand people in 20 villages were quarantined because of him.

In the absence of effective treatment against COVID-19, it becomes crucial to know about the course of the disease for effective patient care.[2] India has recorded the second highest number of confirmed cases till now. In India, Maharashtra state has the highest number of cases.[3] The COVID-19 pandemic continues its havoc in the word.[4] The clinical presentation and outcomes of the patients with COVID-19 have been variable in different countries.[5] This pandemic is not only a huge burden on health care facilities but also a significant cause of

disruption in societies globally.[6] In India, series of measures have been taken by both the central and state governments to break the chain of transmission. One among these is to isolate all suspect and confirmed cases of COVID-19. However, as the number of cases increases, it would be important to appropriately prepare the health systems and use the existing resources judicially. Available data in India suggest that nearly 70% of the cases affected with COVID-19 either exhibit mild or very mild symptoms. Such cases may not require admission to COVID-19 blocks/dedicated COVID-19 hospitals. It is important to put in place mechanisms for triaging and decisions making for identification of the appropriate COVID-19 dedicated facility for providing care to COVID-19 patients.

Three types of covid dedicated facilities are proposed by the MoH and FW, Government of India i.e., dedicated covid care center, dedicated covid health center and dedicated covid hospital. All the 3 types of dedicated facilities have separate ear marked areas for suspect and confirmed cases. Suspect and confirmed cases are not allowed to mix under any circumstances. All suspects cases are tested for COVID-19. Further management of these cases is dependent on their clinical status and result of COVID-19 testing. The dedicated covid care center is offering care only for laboratory confirmed cases that have been clinically assigned as mild or very mild cases or asymptomatic cases.[7] The present study discusses some of the socio-demographic characteristics of cured asymptomatic patients of COVID-19 discharged from a dedicated covid care center in a metropolitan region.

METHODS

This was a cross-sectional study conducted at a dedicated covid care center in a metropolitan region from 27 June 2020 to 10 July 2020. All the cured asymptomatic confirmed cases of COVID-19 discharged from DCCC during above period of 14 days were included in the study. Some socio-demographic variables of the cured patients were recorded in predesigned and pretested proforma at the time of discharge by interviewing the patients on intercom as the patients were isolated in self-contained rooms. Each patient was allotted a separate room. Verbal consent of the patients and permission from concerned authority was obtained to conduct the study. The data is analyzed with the help of Microsoft Excel and represented in tabular form. Proportions, measures of central tendency and standard error of difference between two proportions test of significance was used to interpret the results.

RESULTS

Total 352 cured asymptomatic patients of COVID-19 were discharged from dedicated covid care center between 27 June, 2020 to 10 July, 2020.

Table 1: Some socio-demographic characteristics of cured asymptomatic COVID-19 patients discharged from DCCC.

Variables		Total subjects (n=352) N (%)	Male subjects (n=208) (59.09%) N (%)	Female subjects (n=144) (40.91%) N (%)
Age in years	≤5	09 (02.56)	04 (01.92)	05 (03.47)
	>5-<18	08 (02.27)	02 (00.96)	06 (04.17)
	≥18-60	315 (89.49)	194 (93.27)	121 (84.03)
	>60	20 (05.68)	08 (03.85)	12 (08.33)
Type of residence	Slums/chawls	153 (43.47)	84 (40.38)	69 (47.92)
	Buildings	199 (56.53)	124 (59.62)	75 (52.08)
Place of residence	City	345 (98.01)	204 (98.08)	141 (97.92)
	Out of city	07 (01.99)	04 (01.92)	03 (02.08)
Duration of stay in dccc	10 days	319 (90.63)	191 (91.83)	128 (88.89)
	>10 days	33 (09.37)	17 (08.17)	16 (11.11)
Occupation	Pre-primary	09 (02.55)	04 (01.92)	05 (03.47)
	Students	27 (07.67)	16 (07.69)	11 (07.64)
	Workers	205 (58.24)	173 (83.17)	32 (22.22)
	Retired	19 (05.40)	15 (07.21)	04 (02.78)
	Home makers	92 (26.14)	00 (00.00)	92 (63.89)
Marital status	Married	311 (88.35)	190 (91.35)	121 (84.03)
	Unmarried	12 (03.41)	09 (04.33)	03 (02.08)
	Widows	09 (02.56)	NA	09 (06.25)
	Widowers	03 (00.85)	03 (01.44)	NA
	<18 years	17 (04.83)	06 (02.88)	11 (07.64)
Religion	Hindu	338 (96.02)	199 (95.67)	139 (96.53)
	Other	14 (03.98)	09 (04.33)	05 (03.47)

Of these 352 cured asymptomatic patients, 208 (59.09%) were males and 144 (40.91%) were females (p<0.05). 09 (02.56%) subjects were below 5 years of age. Among them 04 (01.92%) were males and 05 (03.47%) were females. 315 (89.49%) cured asymptomatic patients were in the age group of 18-60 years. Among 208 male subjects, 194 (93.27%) while of the 144 female subjects, 121 (84.03%) were in this age group (p<0.05). 20 (05.68%) subjects were above 60 years of age. The mean and SD of the age of the subjects was 37.53 and 14.09 years respectively. The median age of the subjects was 35 years. Majority of the subjects belong to working class of the society. The range for age of subjects was 02 to 80 years. The mean and SD of the age of male subjects was 38.14 and 13.41 years respectively. The median age of the male subjects was 37 years. The range of age male subjects was 04 to 80 years. The mean and SD of the age of female subjects was 36.83 and 15.16 years respectively. The median age of the female subjects was 34.5 years. The range of age of female subjects was 02 to 75 years. 153 (43.47%) cured asymptomatic patients were staying in slums and chawls while 199 (56.53%) were staying in buildings (p<0.05). 345 (98.01%) subjects were residents of the city (p<0.05%). 319 (90.63%) subjects were admitted for 10 days while rest 33 (09.37%) were admitted for more than ten days (p<0.05). Of the 208 male subjects,173 (83.17%) and of the 144 female subjects, 32 (22.22%) were working (p<0.05). 338 (96.02%) cured asymptomatic patients were Hindus while rest were belonged to other religions (p<0.05). 190 (91.35%) male subjects while 121 (84.03%) female subjects were married (Table 1).

DISCUSSION

Jain et al observed, the median age of the COVID-19 patients was 54 years and 60.90% of them were males, in their study on patients admitted at dedicated covid hospital in Ahmadabad city.[2] Patel et al observed, among the 413 laboratory confirmed patients, 249 (60.29%) were males, majority of the patients i.e., 87 (21.07%) belonged to the age group of 51-60 years.[3] Bansode et al observed, of the 179 mild and moderate patients of COVID-19, the majority of the patients were adults below 60 years of age group, followed by the older age group above 60 years.[4] Males had slightly higher preponderance than females. This finding is similar to our study's finding. In the present study, of the 352 cured asymptomatic patients, 208 (59.09%) were males and 144 (40.91%) were females (p<0.05). Anant et al studied 144 patients with COVID-19 in North India and observed the mean age of the patients was 40.1±13.1 years with 93.1% males.[5] In the present study, it was observed that the mean and SD of the age of the subjects was 37.53 and 14.09 years respectively. The median age of the subjects was 35 years. Jamil et al conducted study in North-East India among 180 laboratory confirmed COVID-19 patients and observed, the median age of the patients was 37.17 years (range 18-80 years) and there were 104 (57.78%) males in the cohort.[6] Of the total enrolled patients, 102 (56.67%) were asymptomatic from the time of exposure till there admission.

The pandemic of COVID-19 has hard-pressed the health infrastructure of all developed as well developing countries of the world alike. The only preventive instrument established so far to contain the virus is isolation of the diseased. Hence, establishing alternate set ups of containment areas was of paramount importance during pandemic. These makeshift centers i.e., DCCC are utilized to admit asymptomatic or mild symptomatic to decrease the burden of already overburdened tertiary health care institutes.[8] Knowledge of the socio-demographic characteristics of COVID-19 patients is important and it has to be considered while forming a policy to control the ongoing pandemic. In the present study, it is observed that the majority of the subjects were belonging to 18 to 60 years of age group and this is a working component of the society.

CONCLUSION

It is very important to identify the asymptomatic patients in the community and to study their socio-demographic characteristics as early as possible through active public health strategies like surveys, testing and tracing. Such cases of COVID-19 should be isolated in DCCC and managed on a priority basis in order to prevent and control the infection.

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