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Original Article

A Community Based Study to Find Out the Profile, Risk Factors and Outcome of People Affected With COVID-19 at Semi Urban Area of Kudi, Jodhpur, and Rajasthan

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Abstract

Introduction : COVID-19 is a viral infection that affects people differently, where the majority of cases develop mild symptoms, some people require hospitalization, and unfortunately, a small number of patients perish. Hence, identifying risk factors is critical for physicians to make treatment decisions.

Methodology : A descriptive study was conducted. Convenient sampling was used. The size of population included in this study was 100 peoples setting of the study was urban area of Kudi at Jodhpur. Survey was conducted using survey tool. Data was analyzed using descriptive statistics.

Result : The study findings stated that 90% of them had 1-3 people affected with COVID-19, 7% people reported loss of family member and 20% of them had post COVID-19 symptoms. 94% of them were vaccinated out of which 85% of them were vaccinated after COVID infection and 11% of them taken before COVID infection.

Conclusion : The study concluded the demographic features on the severity and mortality of COVID-19. Understanding the contributing factors ensures attentive care and informs clinical management of patients with poorer prognoses in the early stages of diseases.

Keywords : critical outcomes; COVID-19; severity, mortality, risk factor, retrospective, implementation

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Introduction

March 25, 2020, 414?179 cases and 18?440 deaths due to coronavirus disease 2019 (COVID-19), caused by the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), had been reported worldwide.1 The epidemic began in mainland China, with a geographical focus in the city of Wuhan, Hubei. However, on Feb 26, 2020, the rate of increase in cases became greater in the rest of the world than inside China. Substantial outbreaks are occurring in Italy (69 176 cases), the USA (51?914 cases), and Iran (24 811 cases), and geographical expansion of the epidemic continues.[1]

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The pandemic of coronavirus disease has created a global emergency after its origin in China, in December 2019. We investigated SARS-CoV-2 infection in the local population of a prime city of Western Rajasthan in India and found that the co-morbidities like diabetes (54.3%), cardiovascular diseases (28.8%), chronic respiratory conditions (18.4%) are the predominant risk factors for acquiring the infection. The young adult male population from urban area were maximum affected by the disease. Most common presenting complains were dry cough (65.7%), fever (62.3%) followed by sore throat (24.1%). A declining positive case percentage was found over the study period, though the number of samples received for SARS-CoV-2 testing increased with time, implying the effectiveness of government policies at community level to spread the outbreak.[2]

The global statistics asstated by World Health Organization revealeda total of 229,858,719 confirmed cases of COVID-19 with 4,713,543 deaths and around 5,874,934,542 vaccine doses administered.[3]

In India confirmed COVID-19 cases clocked to 33,563,421 with 446,050 deaths and818,513,827 vaccine doses given.4

In Rajasthan cases were around 954, 282 with 8,954 deceased and 54,057,194 vaccinated.5

Objectives

1. To identify the risk factors of COVID-19with affected people.
2. To explore the signs & symptoms of COVID-19 affected people.
3. To evaluate the post COVID-19 outcome among the affected people.

Assumptions

- There may be co-morbidity present in people with COVID-19.
- There may be different signs & symptoms experienced by the people with COVID-19.
- There may be many postCOVID-19 symptoms with affected people.

Delimitation

- Study was conducted only in selected area of Jodhpur.
- Data collection period was only one week.
- Data was collected only from the people affected with COVID-19.

Methodology

A Descriptive study was conducted. Descriptive research design was used in the study The samples were recruited by convenient sampling technique. The size of the population included in this study was 100 peoples which were selected according to inclusive and exclusive criteria. Main study was conducted in the urban area of Kudi at Jodhpur, Rajasthan. Informed consent from the selected samples was obtained. Survey was conducted using survey tool. Data was analyzed using descriptive statistics.

Results

Table No: 1. Frequency and percentage distribution of Demographic Variables

(No. 100)

S.No.		Variables	Frequency	Percentage
1.	No. of people in the family			
	i	1-3	20	20%
	ii	4-6	55	55%
	iii	7-9	17	17%
	iv	10-12	5	5%
	v	13-15	3	3%
2.	No. of people affected with COVID in the family			
	i	1-3	90	90%
	ii	4-6	10	10%
3.	No. of people quarantined in the family			
	i	1-3	73	73%

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	ii	4-6	27	27%
4.	No. of people with comorbidities in the family			
	i	Yes	30	30%
	ii	No.	70	70%
5.	Type of co morbidity			
	i	Hypertension	11	11%
	ii	Diabetes	17	17%
	iii	Other	2	2%
6.	No. of persons who lost a family member due to COVID-19			
	i	Yes	7	7%
		ii	No	93 93%
7.	No. of persons admitted due to COVID			
	i	Yes	21	21%
	ii	No	79	79%
8.	Place of admission			
	Ii	ICU	2	2%
	ii	Ward	16	16%
	iii	Quarantine center	3	3%
9.	Problem faced for getting bed during admission			
	i	Yes	1	1%
	ii	No	99	99%

Inference and Discussion on Demographic Details

This study shows that (55%) of the people reported having 4-6 people in their family with (90%)of them saying that 1-3 people were affected with COVID-19 and out of that (73%) reported 1-3 people quarantined. Among those (30%) had comorbidities like hypertension and diabetes; having (7%) people reported loss of family member due to COVID-19 with (21%) facing hospital admission and (2%) had to stay in ICU with only 1% faced difficulty in getting bed. Similarly in a study the inter and intra-home prevalence rates were (17%) and (42.9%) respectively.[5]

Table No: 2. COVID-19 Signs and Symptoms and Post COVID-19 symptoms experienced by the patients (No.100)

S.No.		Variables	Total	Percentage
1.	Signs and Symptoms			
	I	Fever	99	99
	II	Coughing	85	85
	III	Running nose	46	46
	IV	Breathing problem	35	35
	V	Throat pain	17	17
	VI	Muscle pain	28	28
	VII	Fatigue	59	59
	VIII	Loss of taste and smell	34	34

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	IX	Chest pain	23	23
	X	Nausea	30	30
	XI	Vomiting	35	35
	XII	Diarrhea	5	5
2.	Post COVID -19 Symptoms			
	I	Yes	20	20%
	II	No	80	80%
3	Type of Symptoms			
	I	Weakness	20	20%
	II	Joint pain	2	2%
	III	Stomach pain	2	2%
	IV	Breathing Problem	7	7%
	V	Cough	8	8%

Inference and Discussion on Symptoms Experienced by the Patients

In this study 99% of them had fever, 85% had coughing, 59% had fatigue and only 5% of them had diarrhea. 20% of them had post COVID-19 symptom like fatigue joint pain, stomach ache, breathing problem and cough. A similar study, revealed that patients with COVID-19have presented with extra pulmonary manifestations like acute renal failure, diarrhea, hepatic steatosis, myocarditis, meningitis, encephalitis and multi organ failure even as post COVID complications. (8) One research stated hypertension as the most seen comorbidity followed by diabetes mellitus. (7)

Table No: 3. COVID-19 treatment details

(No. 100)

S.No.		Treatment details	Total	Percentage
1.	Vaccination done			
	i	Before COVID-19	11	11%
	ii	After COVID-19	85	85%
2	No.of dosestaken			
	i	Not taken yet	4	4%
	ii	1st dose	26	26%
	iii	2nd dose	70	70%
3	Oxygen administered			
	i	No	8	8%
	ii	Yes	92	92%
4	Problem faced for getting oxygen			
	i	Yes	2	2%
	ii	No	98	98%
5	Problem faced in treatment			
	i	Yes	7	7%
	ii	No.	93	93%

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Inference and Discussion on treatment details

This study showed that 94% of them were vaccinated out of which 85% of them were vaccinated after COVID infection and 11% of them taken before COVID infection. 70% of the population received both doses of vaccine. 92% of the cases had to have oxygenation and only 2% had problem in acquiring it. Satisfyingly 93% of the patients received adequate treatment. A study presented factors hindering vaccination like demand and supply gap, safety concerns, lack of knowledge among population, ease of production, distribution and transportation of vaccines with free of cost administration to people. (11)

Summary, Conclusions and Recommendations

Summary

A community based descriptive study was conducted among 100 people affected with COVID-19 at Kudi, Jodhpur. Survey was conducted using survey tool. Data was entered in MicrosoftExcel and analyzed using descriptive statistics. The study findings stated that 90% of them had1-3 people affected with COVID-19, 7% people reported loss of family member and 20% of them had post COVID-19 symptoms. 94% of them were vaccinated out of which 85% of them were vaccinated after COVID infection and 11% of them taken before COVID infection.

Conclusions

This study was aimed to figure out the situation of COVID-19, risk factors, signs and symptomsand outcome through 3 objectives which presented the data in a numerical form that can be usedto plan thefurther courseof action in theevent of another incidence of raising cases or adifferenttypeof pandemic.

Implications

In the nursing profession,education,administration and research, prevalence rates need to be kept under check by periodic monitoring and awareness programs, modules and safety protocols in the nursing education curriculum can be prepared and evidence based practice to been couraged.

Recommendation

1. Similar research with intervention can be conducted with more population.
2. Study can be done to find out the psychosocial impact of the affected people.

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Conflict of Interest : There are no conflicts of interest.

References

1. WHO Coronavirus disease 2019 (COVID-19) situation report-43. March 3, 2020. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200303-sitrep-43-covid-19.pdf?sfvrsn=2c21c09c_2
2. Sayed,A., Challa, K.T., &Arja, S. (2020). Epidemiological Differences of COVID-19OvertheWorld.Cureus, 12(9), e10316.
3. https://covid19.who.int/
4. https://covid19.who.int/region/searo/country/in
5. https://www.arcgis.com/apps/dashboards/85320e2ea5424dfaaa75ae62e5c06e61
6. Carabaña Morales J. (2020). Datosdeencuestaparaestimarlaprevalenciade COVID-19.Unestudiopiloto en Madrid capital [Survey data as a way to estimate the prevalence ofCOVID-19. A pilot study in the city of Madrid.]. Revistaespanola de saludpublica, 94,e202011159.
7. Sharma, A., Ahmad Farouk, I., &Lal, S. K. (2021). COVID-19: A Review on the NovelCoronavirus Disease Evolution, Transmission, Detection, Control andPrevention. Viruses, 13(2), 202.
8. Baradaran, A., Ebrahimzadeh, M. H., Baradaran, A., &Kachooei, A. R. (2020). Prevalenceof Comorbidities in COVID-19 Patients: A Systematic Review andMeta-Analysis. Thearchivesof boneandjoint surgery, 8(Suppl 1), 247-255.
9. Behzad, S., Aghaghazvini, L., Radmard, A.R., & Gholamrezanezhad, A. (2020). Extrapulmonary manifestations of COVID-19: Radiologic and clinical overview. Clinical imaging, 66,35-41.
10. Yasin S. A. (2020). Prevalence, Intensity and Manifestation of COVID-19 Fear: A Cross Sectional Analysis. Psychiatria Danubina, 32(3-4), 499-504.
11. Pousa, P.A., Mendonça, T., Oliveira, E.A., & Simões-E-Silva, A.C. (2021). Extrapulmonary manifestations of COVID-19 in children : a comprehensive review and patho physiological considerations. Jornaldepediatria, 97(2), 116-139.
12. Beeraka, N. M., Tulimilli, S. V., Karnik, M., Sadhu, S. P., Pragada, R. R., Aliev, G., & Madhunapantula, S. V. (2021). The Current Status and Challenges in the Development of Vaccines and Drugs against Severe Acute Respiratory Syndrome-Corona Virus-2 (SARS-CoV-2).BioMed research international, 2021, 8160860.