Original Research Article

Assessment Of Covid-19 Patients Under Home Isolation In Rewa,M.P.,India City, Madhya Pradesh

Shubhangi Nayak[1], Chakresh Jain[2], Alka Modi[3], Neera Marathe[4*]

[1] Assistant Professor, Department of Community Medicine, Shyam Shah Medical College, Rewa, M.P., India
[2]Assistant Professor, Department of Community Medicine, Shyam Shah Medical College, Rewa, M.P., India
[3]PG Resident, Department of Community Medicine, Shyam Shah Medical College, Rewa, M.P., India
[4]Associate Professor & Head, Department of Community Medicine, Shyam Shah Medical College, Rewa, M.P., India

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Abstract

Background: COVID-19 causes a variety of symptoms in people who are infected. Asymptomatic persons can transmit the virus to others for an extended period. Home isolation of asymptomatic and mild symptomatic cases has been an important remedial measure by Government of India to halt the spread of COVID-19. **Objectives-** To assess the clinico-demographic profile and compliance to isolation practices and experiences shared by COVID-19 patients under home isolation in Rewa city. **Materials and methods**:A Retrospective observational study was conducted to assess home isolated COVID Positive patients during July to October 2020 by a questionnaire based telephonic interview.Results- 66% patients were males and 58% patients gave history of contact with other Covid positive patient. 96% patients showed high compliance with the isolation rules.**Conclusion:** Continuous observation and follow-up of the home isolated COVID-19 patients by health teams had resulted in their compliance with the isolation practices and the patients were quite satisfied with the services provided by the government.

Keywords: COVID-19, SARS-CoV-2 home isolation.

Introduction

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a newly discovered ribonucleic acid coronavirus, isolated and identified from patients with unexplained pneumonia in Wuhan, China in December 2019.[1] SARS-CoV-2 mainly causes respiratory and digestive tract symptom with symptoms ranging from mild self-limited disease to severe pneumonia, acute respiratory distress syndrome, septic shock, and even systemic multiple organ failure syndrome.[2] COVID-19 causes a variety of symptoms in people who are infected. Asymptomatic persons seem to account for approximately 40% to 45% of SARS-CoV-2 infections, and they can transmit the virus to others for an extended period, perhaps longer than 14 days.[3] In India there has been a major issue of concern of alarming rise in the no. of cases of COVID-19 and limited health facilities. In such scenario Home isolation of asymptomatic and mild symptomatic cases has been an important remedial measure by Government of India to halt the spread of COVID-19.

As per the guidelines by MOHFW Gov. Of India, patient clinically assigned as mild/ asymptomatic case by the treating Medical Officer are eligible for home isolation. A care giver should be available to provide care on 24x7 basis. A communication link between the caregiver and hospital is a prerequisite for the entire duration of home isolation. Elderly patients aged more than 60 years and those with co-morbid conditions such as Hypertension, Diabetes, Heart disease, Chronic lung/liver/ kidney disease, Cerebro-vascular disease etc shall only be allowed home isolation after proper evaluation by the treating medical officer.[4]

Success of home isolation depends on careful vigilance and proper follow up and counseling patients by health care teams for early detection and prompt referral of COVID-19 patients. Adoption of covid appropriate behaviour by patients could further help in breaking the chain of transmission of virus in the community.With this rationale, the present study was conducted to assess the clinico-demographic profile of covid-19 patients with their experiences and compliance to isolation practices and aasesment of the services provided to COVID-19 patients under home isolation in Rewa city .

*Correspondence
Dr. Neera Marathe
Associate Professor & Head, Department of Community Medicine, Shyam Shah Medical College, Rewa, Madhya Pradesh, India.
E-mail: ssmcpsm@gmail.com

AIM

To assess the socio-demographic and clinical profile of covid-19 patients under home isolation in Rewa city.

To assess the compliance to isolation practices and experiences shared by them.

To assess the health care services provided to COVID-19 patients under home isolation in Rewa city.

Material & Methods

Study Population and Sampling

A Retrospective observational study was conducted to assess home isolated COVID Positive Patients during July to October 2020. COVID (+) patients were selected from data base of district hospital after permission of institutional ethical committee. Contact number of patients were taken from the District Database.

Inclusion Criteria

COVID 19 patients under home isolation above 18 years of age during July to October 2020 and resident of Rewa city.

Exclusion Criteria

Those who are unable to contact or not willing to participate in the study.

Sampling Method

Systematic sampling technique was adopted. After applying the inclusion and exclusion criteria, a total of 94 patients under Home isolation constituted the study population. Then a questionnaire based telephonic interview was conducted after obtaining verbal consent from patients.

Data Collection Tools

Data was collected with maintaining the confidentiality of patinets on a semi-structured proforma which contained information regarding socio demographic, clinical presentation , co-morbidities, information about compliance with isolation and experiences shared by patients under home isolation and health care services provided to them.

Statistical Analysis

Data was collected , compiled and analyzed. The SPSS Demo version for Windows program was used for statistical analysis. Descriptive statistics results are given as a number and percentage for categorical variables and mean for numerical variables. 5 point Likert scale was used to assess the experiences shared and perception regarding health care services in which patients specified their level of agreement to a statement typically in five points: (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree

Result and Discussion

Table 1: Socio-demographic characteristics

VARIABLE	HOME ISOLATION 94 (%)
GENDER	
Male	62(66)
Female	32(34)
AGE (IN YRS)	
18-45	58(62)
46-60	36 (38)
EDUCATION	
Up to Higher secondary	62(66)
Higher secondary & Above	32(34)
OCCUPATION	
Professional	19 (20)
Business/self employed	25 (27)
Workers and labourers	14 (15)
Unemployed	36 (38)
SES	
Class 1	27(61)
Class 2	41(22)
Class 3	20(11)
Class 4	5(5)
Class 5	1(1)
TYPE OF FAMILY	
Nuclear	54 (57)
Joint	40 (43)

Table 1 shows that out of 94 patients, 66% were males and 34% were females. Similar findings were reported in on Qt Islam et al[4]in Dhaka, and in study of Nitesh Gupta et al[5]. The prevalence rate of tobacco smoking is higher among men than women and men are more commonly employed in jobs outside home and had more exposure which increases their risk of lung disease The mean age was 40.5 years. Most of the respondents were <45 years (62%) and >45years (38%). 66% were educated upto higher secondary and 34% were educated above higher secondary. Around 27% patients were shopkeepers followed by professionals (20%) and workers (15%) about 38% patients were unemployed which included family members incuding elderly, students and housewives. 57 % patients had nuclear families.

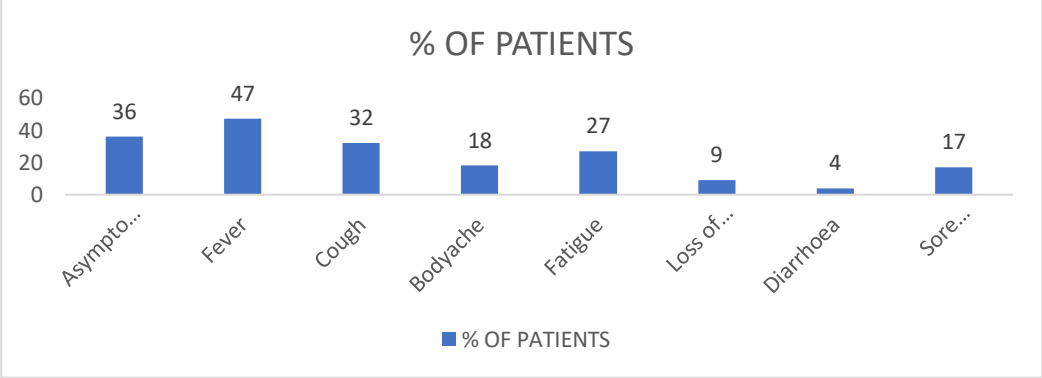

Fig. 1: CLINICAL PROFILE OF COVID-19 PATIENTS

58% patients gave history of contact with other Covid positive patient in family or working places. 26% patients were having comorbidities like hypertension (8%), diabetes (12%), lung diseases (6%). Likewise to our findings, several studies [7,8]

reported that cardiovascular disease (hypertension and coronary heart disease), diabetes, and chronic lung diseases are the most common comorbidities related to COVID-19 PCR positive cases. Stokes et al.[5], in their report, found that cardiovascular disease, diabetes, and chronic lung diseases rated 32%, 32%, and \18%, respectively, among United States PCR positive cases. Yang et al.[6] in their meta-analysis, reported that hypertension (21.1%), diabetes (9.7%), and cardiovascular diseases (8.4%) are in the top list of PCR positive related comorbidities

Graph 1 illustrates about 36% patients were asymptomatic most common symptom experienced was fever, followed by cough and fatigue other symptoms were bodyache ,sore throat, anosmia and diarrhoea. These findings were concordant with other studies. Mizumoto et al. [7] estimated the asymptomatic proportion among the Japanese people was 17.9%. Similarly in study of Nitesh Gupta et al[5] Maximum patient experience fever and cough (42%) followed by sore throat in hospitals settings. and The main symptoms of patients were fever (89%), cough (85%) & dyspnea (76%)%) in study on Qt Islam et al[4]in Dhaka.

TABLE 2: COMPLIANCE WITH HOME ISOLATION OF COVID-19 PATIENTS

VARIABLE	No. (%)
Did the health team visited your place	94 (100)
Didi u follow the isolation rules	90 (96)
Was the room well ventilated	81 (86)
Did you took medicines on time	92 (98)
Did you sanitized your home after completion of home isolation	90 (96)
Did u pay attention to the separate use of household items such as plates, glasses, and towel	85 (90)
Was there anyone to look after you	79 (84)
Did you used mask in common areas	89 (95)
Did you dispose your mask in proper way	84(89)
Did you used disinfectant for cleaning	70 (74)
Was your home sanitized	94 (100)
What u do in free time in home Reading book/ mobile / others	 3(3) 88(94) 3(3)
How many members of your family become positive after your home isolation	20(21)
Did u monitored oxygen using pulse oximeter	28 (30)
Did u ate food on time	85 (90)
How many patients were Referred to higher centres	8 (9)

As per Table 2, during the home isolation period, most of the patients followed up in this study showed high compliance with the isolation rules (96%). All the patients were visited by health teams and their homes were sanitised. 90% patients were following Covid appropriate behaviour as per guidelines. 95% patients used masks and 89% disposed the used masks in seperate bins. 74% used disinfectant for cleaning. 30% patients had pulse oximeter for monitoring oxygen levels. In a study by Yılmaz, ZU, et al.[9], most patients showed high compliance with the isolation rules.. Two-thirds, 65.4% followed social distancing rules; however, 43.8%did not wear masks when being in public areas. More than 90% patients were paying attention to ventilation rooms, cleanness at individual and family levels.

TABLE-3 EXPERIENCES SHARED BY COVID-19 PATIENTS

USING LIKERT SCALE (1-5)

S. No.	EXPERIENCE	%				
		1	2	3	4	5
1	I was satisfied with the health care services provided by the govt.	0	3	22	40	35
2	I was anxious or worried about my health.	0	2	15	27	56
3	I felt lonely and sad during the period of isolation.	0	4	8	43	45
4	I was properly counselled by health teams for covid appropriate behaviour.	0	16	14	48	22
5	I was satisfied with the sanitisation services provided by the govt.	0	0	7	35	58

Table 3 shows that 75% patients agreed with the statement that they were satisfied with health care services and sanitization services provided by the government. More than 80% patients were anxious or worried and felt lonely during the period of isolation and 70% were satisified with the counselling done by health teams for covid appropriate behaviour.

Conclusion

This study found that men were more commonly infected with COVID-19 than women. Patients with a history of comorbidity, especially hypertension, diabetes are more likely to contract the disease. Continuous observation and follow-up of the home isolated COVID-19 patients by health teams had resulted in their compliance with the isolation practices and the patients were quite satisfied with the services provided by the government. Home isolation has been an effective way to prevent the spread of Coronavirus disease by cutting the chain of transmission by systematically tracking and isolating cases and susceptible individuals who have been in contact with any confirmed cases.

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