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Case Report

Health Insurance a Boon for Families with Covid 19 Hospitalization

Rachana Karur[1] and K Suresh[2]*

[1]MPH Scholar, Karnataka State Rural Development and Panchayat Raj University (KSRDPRU), GADAG, Karnataka, India

[2]Public Health Consultant Bengaluru and Visiting Professor of Practice, KSRDPRU, Gadag, India

***Corresponding Author:** K Suresh, Public Health Consultant Bengaluru and Visiting Professor of Practice, KSRDPRU, Gadag, India.

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Abstract

Severe Acute Respiratory Syndrome (SARS-CoV-2), the novel corona virus detected in 2019 has posed threat to human suffering and deaths. Even among the recovered family we see long term effects of i) Health- aches and pains, mental depression, exaggeration or recurrence or new emergence of diabetes, cardiac and pulmonary problems ii) Loss of jobs, low income, mounting debts iii) Nutrition- especially among children and women as the variety in diet has reduced and supplementary meals in schools and Anagnwadi centers were disrupted iv) Learning as the schools were closed for more than 18 months and v) Increased screen time of adolescents due online learning leading to internet addiction.

We report here the saga of five families in the neighborhood within a span of one week that was led by an unusual confidence led by a 90-year-old lady, tested positive for covid-19, one member each was admitted to a private hospital.

The healthy lifestyle of the elderly lady and other members following her footstep was a role model for the village The first case was a male of 52 years admitted to hospital on 1 December 2020, followed by 2 cases on 5th December a 65-year lady and 45 years male and on 7 December 2020 2 more cases of 35- and 90-years ladies on 7th December 2020. In terms initial symptoms 3 of them had fever, 2 had chills, 1- weakness, 1-loss of appetite and 1 had lost smell sensation. All of them had reached the hospital in the second week of infection and respiratory distress on admission. All of them were admitted to a private SDM Medical College Hospital, Dharwad. They were all managed by the standard national protocol. The institutional management and the family's cooperation are talk of the village and surrounding villages. The elderly lady stood out among all of them, though she seemed tired and weak co-operated with the doctors and the hospital staff. Her spirit of getting well soon became popular and she became an inspiration for the youth admitted in the hospital for covid-19. With proper attention and care she was discharged after 10 days. At home, the family took extra care, with proper food, rest and exercise. Her previous health condition helped her in coping up and fighting against the corona virus disease which is an exemplary to the younger generation.

Looking at the hospitalization cost and the value of health insurance was a first attempt in this part of Karnataka state. Hospitalization of five members of the family has caused sizeable expenses. While four of them had health insurance and one did not. A comparison of the cost of Covid 19 treatment and insurance share indicated a minimum saving of 90% of the total cost for those insured when compared to the one who was not insured. The average cost worked out to be around INR 138,000 per patient with a minimum of 100,000 and a maximum of 190,000.

Keywords: Covid 19; SARS-CoV-2; Gadag

Introduction

Severe Acute Respiratory Syndrome (SARS-CoV-2), the novel corona virus detected in 2019 has posed threat to human beings. A fatal pandemic, covid-19 has made human life upside down. People with comorbidities are more prone to novel virus. With the attack of pneumonia and clinical features of hypoxemia and dyspnea survival rate is high. The list of symptoms and sings started with respiratory system and over the last 15 months the presentations can exhibit affecting any system of human body. Recently long covid symptoms are troubling, affected people for as long as 3-12 months in various manner.

Case Studies

The first case of a male aged 52, who complained of fever and fatigue and self- medicated. After 4-5 days his condition worsened, and he then consulted the doctor. CT-scan, swab test and RTPCR tests confirmed positive for covid-19. At the hospital he was treated with heparin injection, an oral antidiabetic tablet, insulin injection, antibiotic injection vitamin C, zinc tablet, and BP tablets were prescribed for the treatment. Though he was admitted for 5 days, he was on oxygen support for 1 day and was discharged with some tablets on 6th day.

On 5th of December 2020 65-year-old daughter of our lead patient was admitted with complaints of loss of appetite and chills, CT scan and RTPCR confirmed the diagnosis. She was hospitalized for 5 days. Remdesivir injection, Vitamin C tablets were used for her treatment. She was also on oxygen just for 1 day. Post-discharge she was prescribed medicines for 10 days along with the insulin injection thrice a day.

On the same day a male of 42 years was also admitted with complaints of chills, weakness and cough who was subjected to the CT-scan, RTPCR and swab test after 2 days of symptoms. As the result was positive, he was admitted to the hospital. Vitamin C, zinc and multivitamin tablets, cough syrup and Remdesivir injection were advised for the treatment. Gradually, he showed signs of recovery and with the prescription of some tablets he was discharged on the 6th day.

On 7 December 2020, 36 years female with the history fever for 2-3 days, was also advised for CT-scan and RTCPR but with the swab test and confirmed Covid-19 positive. She was also treated with Remdesivir along with vitamin C, zinc, multivitamin tablet, and cough syrup. She was discharged on the 6th day.

Name of the patient	Age	Date of admission	Signs	Symptoms	Investigation
Anil	52	1 Dec 2020	Mild fever	Loss of apatite	RTPCR Test, ct- scan Test
Vimala	65	5 Dec 2020	Fever, Oxygen saturation	Chills, loss of apatite	RTPCR Test, Swab test
Vinod	42	5 Dec 2020	Fever Normal oxygen saturation	Chills, Weakness	Swab Test, RTPCR Test
Netra	35	7 Dec 2020	Fever	Loss of smell	RTPCR Test Antigen Test
Kamalamma	90	7 Dec 2020	Low oxygen saturation	Breathlessness, Fever	RTPCR Test, ct chest

Table 1

On the same day our family's elderly lady of 90 year reported with respiratory distress Immediately, she was admitted to the local hospital in Gadag district. Doctors put her on oxygen support observed for one day. She continued to have mild fever and low saturation level and fatigue. Investigation confirmed that she was infected with the novel corona virus. Generalized weakness, Body pain, and fever Cold, Cough, and fever, Breathlessness Loss of appetite Signs: High grade fever, decrease oxygen Saturation, Severe sweating, Chest pain, Conditions worsened day by day., therefore she was shifted to the SDM hospital, Dharwad, Repeat RTPCR was done.

Physical examination

The auxiliary temperature was 102^{0} F. Respiratory Rate = 30/minute, Pulse 130/minute

Investigations

- SPO_2 Saturation level was 78%.
- Blood sugar: Random = 158, PP level = 317,
- Hb% was 10%.
- CT-scan - Write report figure
- RTPCR - Positive

On the first day she was in the ICU, the patient seemed to be weak but the second day she responded well to the treatment and co-operated.

Treatment given

- Remdesivir injection 200 mg for one day and 100 mg for next days.
- Methylprednisolone injection is 400 mg 2 times a day for 2 days.
- Vitamin C tablet 500 mg 3 times a day.
- Zinc tablet daily once in the afternoon.
- Heparin injection 40 Mg once a day
- Ivermectin tablets are given 12 mg once a day for 5 days.
- Oxygen support was given for 3 days.
- Aspirin tablet 75 mg daily afternoon. Discharge after 10 days with treatment.

On discharge advised

i) Home oxygen therapy. ii) Vitamin C tablets, 500 mg 3 times a day. iii) Preadmit 8 mg for 7 days and advised to continue for the next 5 days. The patient was suggested to rest.

Follow-up on 20 December

Though she was weak had recovered well.

Cost saving through insurance

Insurance Company	Patient Name	Annual Premium/Income	Total Bill INR	Insurance Share	Client Share and when paid
ESIS	Kamalamma	15,000/500,000	100,000	92,000	8000 on discharge
NIC	Vimala	36,000/110,000	147,000	132,000	15,000 on discharge
NIC	Vinod Reddy	35,000/12,00,000	147,000	132,000	15,000 on discharge
NIC	Netra	35,000/650,000	190,000	175,000	15,000 on discharge
None	Anil	NA/700,000	106,000	NA	50,000 in advance +56,000 on discharge
TOTAL			6,90,000	5,31,000	1,59,000

Table 2

Discussions

Covid-19 has disturbed the everyday life of human beings posing several challenges. Irrespective of all age groups, it weakened the emotional and moral status of all affected people. Old age people struggle to stay happy due to lack of attention, food, and basic medical facilities during this period. The risk factors age, and other sickness poses larger survival risk of elderly people. The physical and emotional vulnerability in the aged people reduces the chances of recovery. However, the case investigated here was an exceptional one.

There are WHO guidelines for the investigation of cases and clusters of COVID-19 [1], is a tool to be used by local, regional, or national health authorities. A congregate living setting is a facility where people live for an extended period in a shared space, either in individual units with a shared building and common spaces, or with shared rooms or units. Because people are living in proximity, these are settings that many countries/states monitor for the spread of COVID-19. In USA. Cases and deaths in congregate living settings are the total number of molecular (PCR) positive and antigen positive COVID-19 cases and deaths among residents or staff of the congregate living settings [2]. As of now only USA monitors such clusters officially.

A total of 134 clusters comprised of 4033 cases were identified in Seoul Metropolitan City and Gyeonggi Province of south Korea.

The clusters were categorized into {type I small size and short duration, II- small size for long duration, type III- medium size & long duration, and type IV – large size & long duration}. Increased social distancing was related to a shift from large to small-sized clusters. Classification of clusters provided opportunities implement more effective suppression strategies. Social distancing administered by the government may effectively suppress large clusters but may not effectively control small and sporadic clusters.

In India the clusters are in apartment complexes or crowded residential areas like wards, slums. Lanes and colonies. A study in Dharavi Mumbai and Nizamuddin, Delhi indicate that the clustering of hotspots provides homogeneous groups that can be discriminated in terms of number of cases and related covariates [3]. While Nizamuddin reported a manifold increase in the risk of infection. In contrast it was seen that there was a rapid decline in the number of cases in Dharavi within a span of about one month.

Three new COVID-19 clusters, all in the Yelahanka zone, with a total of 19 positive cases were detected in Bengaluru in the last week of February 2021, taking the overall number of such groups to six in the last fortnight of February 21.

Two of the clusters were detected in educational institutions: five cases at Agragami College and nine students tested positive at Sambhram Academy of Management Studies. The third one, with five cases, is in a residential complex, Purva Venezia apartments [5].

There are no studies published about clustering of cases in a single neighborhood in just one week's time like our report as was seen in this case report. Also, the fact that we compared the hospitalization cost in private facility makes it worth publishing.

In June 2020 Government of Karnataka asked for 50% of the beds in private hospitals having facilities to treat Covid-19 patients to be reserved for the treatment of patients referred by public health authorities. This included the high-dependency unit and ICU (intensive care unit) beds both with and without ventilators.

While the rates per day for general ward was fixed at ₹5,200 for AB-ArK patients and ₹10,000 for other insurance and cash patients; the rate for wards with oxygen was fixed at ₹7,000 for AB-ArK and ₹12,000 for other insurance and cash patients. Similarly, the rates for Isolation ICU were fixed at ₹8,500 for AB-ArK and ₹15,000 for other insurance and cash patients [6].

The state's average time for recoveries was 17 days, and the patients needed to spend a minimum of Rs. 1.7 lakh for a 17-day stay in the general ward [7]. The hospitalization cost in our case was of an average of 138,000, with a minimum of 100,000 and a maximum of 190,000.

Given our cases stayed for about 5-6 days, they should have paid at the rate of 12,000 per day an amount of 60 to 70K except for the one in ICU for 3 days. What we observed and facility justified by saying that each case was in ICU for 2-3 days till stabilized. The biggest advantage of saving of 90% of hospitalization in our study.

Conclusion

Family/Neighborhood cluster of SARS a contagious viral disease in a week's time needing hospitalization as reported in our study is rare.

The fact that despite being from idle class socio-economic status many families preferred private hospitals for Covid 19 care.

The recovery of all of them especially a ladies aged 90 and 65 is sort of history in the district.

Elderly people suffering from other comorbities like Diabetes, Kidney Disease, Hypertension etc. need extra attention and treatment for the same.

Neighborhood families hardly use masks in house and thus expose all at the risk.

Many families with multiple individuals falling prey to Covid 19 faced financial crisis.

The overall costing of Private Bed costs can be rationalized.

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