



"LOCKDOWN" COVID 19 PANDEMIC - PAEDIATRIC FEVER OPD AT TERTIARY CARE CENTER

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ABSTRACT

INTRODUCTION: The ongoing SARS COV- 2 pandemic has affected so many people worldwide but paediatric patients were affected in lesser number with less morbidity as compare to adult population. Even though, the infectivity of SARS COV- 2 was lesser different mode of presentation of illness was noted. So a study was carried out to know its demography, presentation of illness, infectivity in different paediatric age groups, rate of mortality and different comorbid conditions associated with it.

AIM: To study the demographic profile, mode of presentation and mortality in paediatric age group who attended fever opd at tertiary care center.

METHOD: Retrospective Observational study from 1st April 2020 to 31st May 2020

RESULT: Total- 1361 patients attended fever opd, among them maximum patients presented with only fever (64.8%), 15 of them had travel history but none of them came positive for COVID- 19, 53 patients were suspected out of which 15 turned out positive (LAB CONFIRMED), maximum were from containment zone. Most of them presented on 1-3 days of fever. So there was no late presentation due to "LOCKDOWN". Various co-morbid conditions were observed. Out of 15 lab confirmed only 3 patient got expired. All of them presented with SARI.

CONCLUSION: Thus concluding that there was no effect of lockdown in presentation of children at health centers. Early presentation was seen, out of 1361 only 15 turned out to be positive which is only (1.1%) showing less infectivity and transmission of SARS COV-2 in pediatric age group.

KEYWORDS : SARS COV- 2, PAEDIATRIC FEVER OPD, LOCKDOWN

INTRODUCTION:

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus.

Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness.

The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important that you also practice respiratory etiquette (for example, by coughing into a flexed elbow).

At this time, there are no specific vaccines or treatments for COVID-19. However, there are many ongoing clinical trials evaluating potential treatments. WHO will continue to provide updated information as soon as clinical findings become available.

Study Period: 1st April 2020 to 31st may 2020

Study Site: Smt. Shardaben General hospital

Type Of Study: Retrospective Observational study

AIMS AND OBJECTIVE:

- 1) To study demographic profile of children attending fever opd
- 2) To study number of children having SARI and ILI among who attended fever opd

- 3) To study the rate of mortality among the laboratory confirmed cases

MATERIAL & METHODOLOGY:

This study was carried out at SMT SHARDABEN GENERAL HOSPITAL for a period of 2 months during COVID-19 pandemic. Fever OPD was conducted and children were suspected and classified into SARI, ILI and fever more than 7 days according to the guidelines given by MoHFW (Ministry of health and family welfare) which were as mentioned below:

When To Suspect:

- All symptomatic individuals who have undertaken international travel in the last 14 days or
- All symptomatic contacts of laboratory confirmed cases or
- All symptomatic healthcare personnel (HCP) or
- All hospitalized patients with severe acute respiratory illness (SARI) (fever AND cough and/or shortness of breath) or
- Asymptomatic direct and high risk contacts of a confirmed case (should be tested once between day 5 and day 14 after contact)
- Symptomatic refers to fever/cough/shortness of breath.
- Direct and high-risk contacts include those who live in the same household with a confirmed case and HCP who examined a confirmed case.

Confirmed Case:

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms

Following this guidelines patients were suspected and Nasopharyngeal and Oropharyngeal swab was taken and sent for laboratory confirmation. Thus, data was collected and study was carried out.

EPIDEMIOLOGY:

Table 1: DEMOGRAPHY IN FEVER OPD

	Attended fever opd	Suspected from them	Confirmed positive		Mortality from confirmed positive
			Containment zone	Non - containment zone	
No of patients	1361	53(3.8%)	13(87%)	2(13%)	3(20%)

Table 2: Presentation Of Illness In Fever OPD

Symptoms	Total fever opd patients	Suspected cases	Confirmed Positive Cases	Expired Cases
SARI	26(1.91%)	26(1.91%)	4(0.3%)	3(0.2%)
ILI	453(33.2%)	9(0.7%)	3(0.2%)	0
Only fever	882(64.8%)	18(1.3%)	8(0.6%)	0

Null hypothesis: Irrespective of mode of presentation possibility to come positive is similar for every patient presented with SARI, ILI or ONLY FEVER.

If we consider 2x2 contingency table for mode of presentation and lab confirmed positive patients. The 'P' value for each table is less than 0.5 (I.e.<0.00001) which is not significant which reject null hypothesis.

So chances of lab confirmed positive cases are more with patients who presented with SARI then other mode of presentation.

Table 3: Age Distribution In Fever OPD

AGE	Total fever OPD Patients	Suspected Cases	Confirmed Positive Cases	Expired Cases
0-1yr	724(53.1%)	26(1.9%)	8(0.6%)	2(0.1%)
1-5 yrs	519(38.1%)	23(1.68%)	5(0.3%)	1(0.07%)
5-12yrs	118(8.8%)	4(0.2%)	2(0.1%)	0

Table 4: Correlation Of Days Of Fever With Morbidity And Mortality

Fever Days	Total fever OPD patients	Suspected cases	Confirm positive cases	Expired cases
1-3 days	864(63%)	30(2.2%)	12(0.9%)	3(0.2%)
3-7 days	429(31%)	15(1.1%)	1(0.07%)	0
>7 days	68(6%)	8(0.6%)	20.1%)	0

Table 5: Association Of Contact History And Positivity Among Them

	Contact H/o	Positive among them
No of patients	3(0.2%)	2(67%)

Table 6: Comorbid Conditions Seen In Confirmed Positive Cases

CO-MORBID CONITIONS	CONFIRMED POSITIVE CASES
LIVER ABSCESS	2(0.15%)
CONVULSION	3(0.2%)
CEREBRAL PALSY	1(0.07%)
FAILURE TO THRIVE	1(0.07%)

DISCUSSION:

A study carried out during lockdown COVID-19 pandemic (1st April 2020 - 31st May 2020) at Smt SHARDABEN CHIMANLAL LALBHAI HOSPITAL, SARASPUR.

Total- 1361 patients attended fever opd, out of which 760(55.8%) were male & 601(44.2%) female. Among them maximum patients presented with only fever (64.8%), ILI (33.2%) & SARI (1.91%), 15 of them had travel history but none of them came positive for COVID-19, 53 patients were suspected, among them 49% presented with SARI, ILI (16.9%), only fever (34.1%).

Among suspected 15 turned out positive (LAB CONFIRMED), maximum were from containment zone. 4 of them presented with SARI, ILI (3) & only fever (8). 3 of them had contact with lab confirmed cases and 2 came positive. Most of them presented on 1-3 days of fever. So there was no late presentation due to "LOCKDOWN". Co-morbid conditions observed were LIVER ABSCESS (2) FEBRILE CONVULSION (3) CEREBRAL PALSY (1), FAILURE TO THRIVE (1).

Out of 15 lab confirmed only 3 patient got expired. All of them presented with SARI.

Worldwide, relatively few children have been reported with COVID-19, the disease caused by the novel coronavirus. Data from the Netherlands also confirms the current understanding: that children play a minor role in the spread of the novel coronavirus. The virus is mainly spread between adults and from adult family members to children. The spread of COVID-19 among children or from children to adults is less common.

Based on reports from municipal public health services (GGDs), children aged 0-17 years only represent 0.9% of all reported patients with COVID-19, although they comprise 20.7% of the population. Only 0.6% of the reported hospitalizations involved children under the age of 18.

A research was conducted on 149,082 cases in the United States, out of which 2572 cases were under the age of 18. When the symptoms, severity and hospitalization were checked, it was found that only 70% of children had typical coronavirus symptoms and not all. In adults, almost all had typical symptoms. Not all children show the basic symptoms.

It was also seen that only 5% of children, amongst those who have tested COVID-19 needed hospitalization. Further, the mortality rate was also low amongst pediatric coronavirus cases.

The lives and futures of children across South Asia are being torn apart by the novel coronavirus (COVID-19) crisis. While they may be less susceptible to the virus itself, children are being profoundly affected by the fallout, including the economic and social consequences of the lockdown and other measures taken to counter the pandemic. Decades of progress on children's health, education and other priorities risk being wiped out. Yet the crisis has also presented opportunities to expose and tackle some of the longstanding challenges facing children in the region, especially those from the most vulnerable communities.

CONCLUSION:

Thus concluding that there was no effect of lockdown in presentation of children at health centers. Early presentation was seen. Out of 1361 only 15 turned out to be positive which is only (1.1%) showing less infectivity and transmission of SARS COV-2 in pediatric age group.

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