Retrospective study of covid-19 Prescription pattern in tertiary care hospital

Mohammed Sohail Pasha[1]*,Kokkarakonda Anjali[1], Moguloju Sucharitha[1],
Guguloth Chiranjeevi[1] , Nagesh Adla[2]
Dr.Nadeem AhmedMBBS,MDHM Medical Administrator [3].
Dr. A. Shyam sunderPhd4.

[1]*Pharm.D Intern, Department of Pharmacy Practice, Balaji Institute of Pharmaceutical Sciences, Warangal, Telangana, India.*
[2]*Assistant Professor, Department of Pharmacy Practice, Balaji Institute of Pharmaceutical Sciences, Warangal, Telangana, India.*
[3] *MBBS,MDHM Medical Administrator,Ajara hospitals, Warangal, Telangana, India.*
[4]*Principal, Balaji institute of pharmaceutical sciences, Warangal, Telangana, India.*

ABSTRACT
Aim: To evaluate the prescription pattern and comorbid conditions in covid patients .

Methods:ARetrospective study was done at General medicine hospital in warangal.450 covid 19 positive patients from 20 years to 80 years were enrolled for the study. The data was collected from MRD department.

Results: In our study 450 Covid 19 positive patients are considered out of which age groupsin between 20-30years of age group there are 27 patients of which 20 are males & 7 are females, in between 31-40 years of age group there are 44 patients of which 37 are males & 7 are females, , in between 41-50years of age group there are 97 patients of which 75 are males & 22 are females , in between 51-60 years of age group there are 124 patients of which 87 are males & 37 are females , in between 61-70years of age group there are 103 patients of which 73 are males & 30 are females , in between 71-80years of age group there are 55 patients of which 42 are males & 13 are females.In overall, males are more than females.

Conclusion: More attention to be paid inregular hand washing with soap , use of alcohol-based hand sanitizers; limiting person to person contact and practice in social distance; wearing face mask in public places and over all limited going to public areas currently unless it is necessary. Early vaccination can reduce the occurrence of covid 19.

Keywords: Comorbidities, covid-19, Prescription pattern.

I.   INTRODUCTION

On 31 December 2019, the Wuhan Municipal Health Commission in Wuhan City, Hubei province, China, reported a cluster of 27 pneumonia cases (including seven severe cases) of unknown aetiology, with a common reported link to Wuhan's Huanan Seafood Wholesale Market, a wholesale fish and live animal market .By 20 January 2020, there were reports of confirmed cases from three countries outside China: Thailand, Japan, and South Korea. These cases had all been exported from China. On 9 January 2020, the China CDC reported that a novel coronavirus (later named SARS-CoV-2, the virus causing COVID-19) had been detected as the causative agent for 15 of the 59 cases of pneumonia .[1]

Coronavirus (Cov) is a large family of positive-sense, single-stranded RNA viruses that belong to the Nidovirales order. The order includes Roniviridae, Arteriviridae, and Coronaviridae families[2]. The Coronaviridae family is subdivided into Torovirinae and Coronavirinae subfamilies. Coronavirinae is further subclassified into alpha-, beta-, gamma-, and delta-COVs[2]. Phylogenetic clustering accounts for the classification of these subtypes of viruses. Their viral RNA genome ranges from 26 to 32 kilobases in length[3]. They can be isolated from different animal species. These include birds, livestock, and mammals such as camels, bats, masked palm civets, mice, dogs, and cats. The widespread distribution and infectivity of COV make it an important pathogen[3].

On the evening of 24 March 2020, the Government of India under Prime Minister Narendra Modi ordered a nationwide lockdown for 21 days, limiting movement of the entire 1.38 billion (138 crore) population of India as a preventive measure against

the COVID-19 pandemic in India.[4] It was ordered after a 14-hour voluntary public curfew on 22 March, followed by enforcement of a series of regulations in the country's COVID-19 affected regions.[5]

The Government of India confirmed that India's first case of Coronavirus disease 2019 on 30 January 2020 in the state of Kerala, when a university student from Wuhan travelled back to the state [6].Indian government announced the nationwide lockdown from midnight of that day, for a period of 21 day[7].

While the SARS coronavirus is thought to be an animal virus from an as-yet-uncertain animal reservoir, perhaps bats, that spread to other animals (civet cats) and first infected humans in the Guangdong province of southern China in 2002, the MERS coronavirus was passed on from dromedary camels to humans in Saudi Arabia in 2012 [8].

There is evidence that the SARS-CoV-2 has also been transmitted from bats to human, this is the most common transmission. When an infected person coughs, sneezes, or talks, droplets or tiny particles called aerosols carry the virus into the air from their nose or mouth. Anyone who is within 6 feet of that person can breathe it into their lungs[9].

II.   MATERIALS AND METHODS
Study Design: Retrospective observational study.
Study Site: Ajara hospitals, Warangal Telangana, India.
Study Period: The study was carried for six months from November 2020-April 2021 with the approval of Institutional ethics committee.
Sample Size:A total of 450 patients were recruited in our study.
Inclusion Criteria: Covid 19 positive patients of age 20-80 years are included in the study. Covid 19 positive patients with comorbidities like HTN, Type II DM , CVA , CAD and Asthma are included in the study .
Exclusion Criteria: Covid 19 positive patients of age 0-19 years are excluded from the study.

Asymptomatic covid 19 patients and Undiagnosed covid 19 patients with symptoms are excluded from the study.
Study Procedure: Study site-I , study -I: " To know the prescription pattern of covid 19 patients of different age groups" was a record-based retrospective , case control study ,in which the data was collected from record of tertiary care hospital.
The collected sample size of the study was 450 , The factors such as Age, date of admission , Symptoms , Investigations, vitals such as temperature , saturation levels , respiratory rate, heart rate are noted & Treatment plan throughout the patient stay in hospital till discharge were noted of different age group covid 19 positive patients.
The collected data was analysed by using MS EXCEL 2019.
study site-I , study -II: " To know the prescription pattern and symptoms for covid 19 in non-comorbid patients and in comorbid patients."The data was collected from a tertiary care hospital.
The collected sample size of the study was 450, out of which 240 were excluded from the study according to the exclusion criteria . The factors such as Comorbidities , Age , No. of days of stay in hospital , Symptoms ,Investigations , Treatment received were noted and compared to determine the prescription pattern for covid 19 comorbid patients.
The collected data was analysed by using MS EXCEL 2019.
study site-I , study -III: " To know about the number of days of stay in hospital and type of discharge of covid 19 patients ."The data was collected from a tertiary care hospital.
The collected sample size of the study was 450. The factors such as Comorbidities , Age, No. of days of stay in hospital , Symptoms ,Investigations , Treatment received, and type of discharge were noted to determine number of days of stay in hospital and type of discharge for covid 19 patients.
The collected data was analysed by using MS EXCEL 2019.

III.   STATISTICAL ANALYSIS

RESULTS

DRUGS	YES	NO	%
Favipiravir	4	23	14%
Remdisevir	22	5	81%
Pantoprazole	27	0	100%
Paracetamol	5	22	18%
Methyl prednisolone	25	2	92%
Dexamethasone	2	25	7%
Vit-C	24	3	88%
Doxycylline	20	7	74%
Zinc	19	8	70%
Enoxaparin	19	8	70%
Thiamine	7	20	25%
Atorvastatin	20	7	74%
Goutinil	23	4	85%
Mucinac	24	3	88%
Forcart synchrobreathe	7	20	25%
Vic D3	15	12	55%
Zofer	0	27	0%
Zincovit	1	26	3%
Zostum	3	24	11%

Table 1. Prescription pattern analysis of age 20-30 years in covid 19 patients .
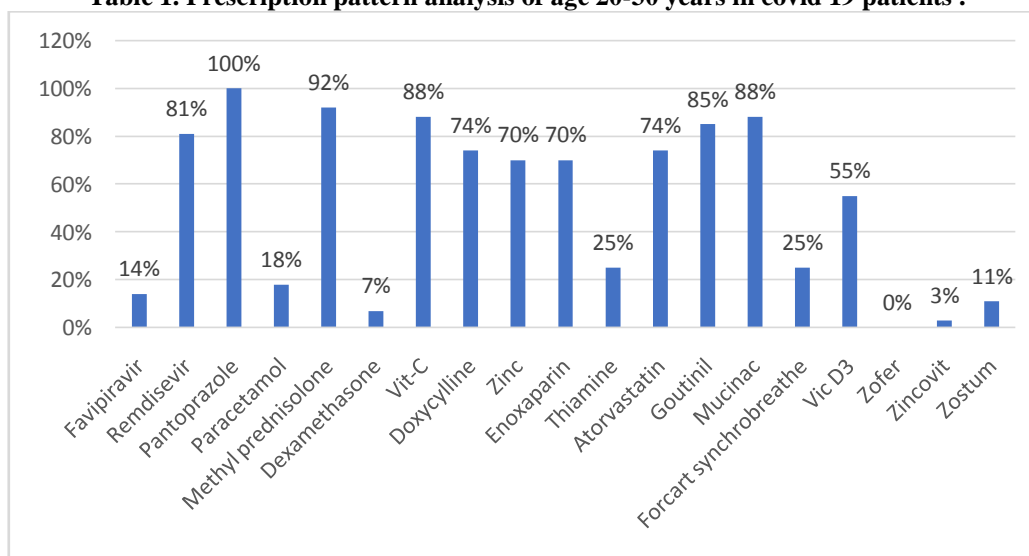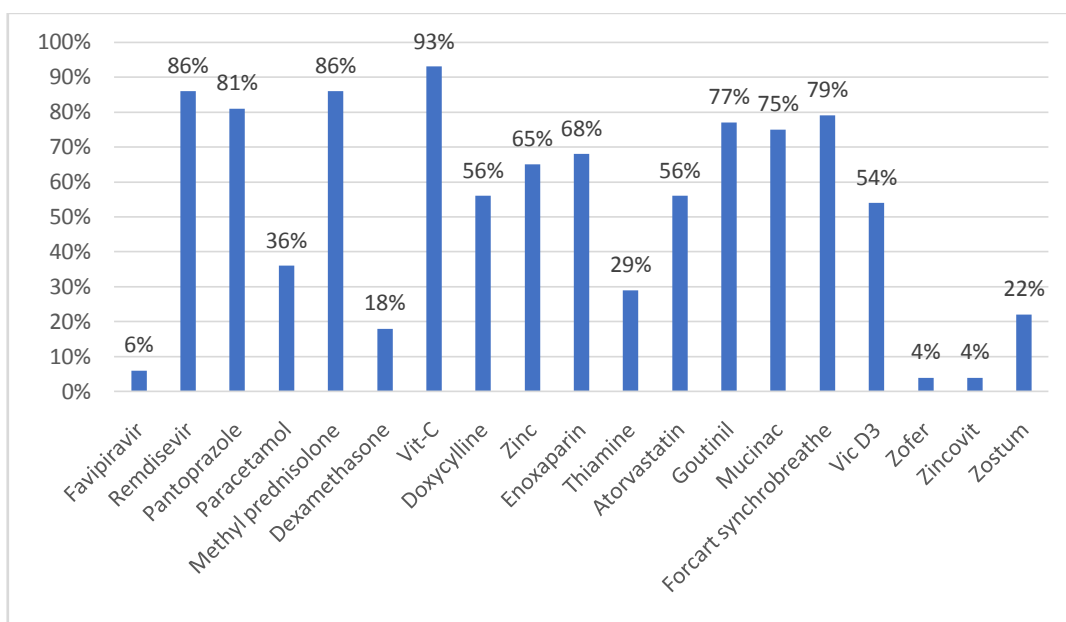

Figure 1.Result of prescription pattern analysis of age 20-30 years in covid 19 patients .

The above bar graph depicts the information about the drugs prescribed for the covid 19 patients of age between 20-30 years. The data was taken from 27 covid 19 positive patients.

In overall, Pantoprazole has been taken by a greater number of patients. In addition, Ondansetron was taken least by patients, nearly 3/4th of patients received Zinc & Enoxaparin.

In detail, Pantoprazole was taken by 100% patients, Methyl prednisolone was taken by more than 90% of patients. Remdesivir, Vit c, Goutinil, Mucinac were taken between 80-90% of patients.

followed by Doxycycline, Zinc, Enoxaparin, Atorvastatin was received by 70-80% of patients .half of the patients received Vit D3 ,1/4th of patients received Thiamine & Fora cart synch breathe. The least number of patients that is 0-10 % have received Favipiravir, Dexamethasone, Ondansetron , Zincovit & Zostum.

DRUGS	YES	NO	%
Favipiravir	3	41	6%
Remdisevir	38	6	86%
Pantoprazole	36	8	81%
Paracetamol	16	28	36%
Methyl prednisolone	38	6	86%
Dexamethasone	8	36	18%
Vit-C	41	3	93%
Doxycylline	25	19	56%
Zinc	29	15	65%
Enoxaparin	30	14	68%
Thiamine	13	31	29%
Atorvastatin	25	19	56%
Goutinil	34	10	77%
Mucinac	33	11	75%
Forcart synchrobreathe	9	35	79%
Vic D3	24	20	54%
Zofer	2	42	4%
Zincovit	2	42	4%
Zostum	10	34	22%

Table2.Prescription pattern analysis of age 31-40 years in covid 19 patients .
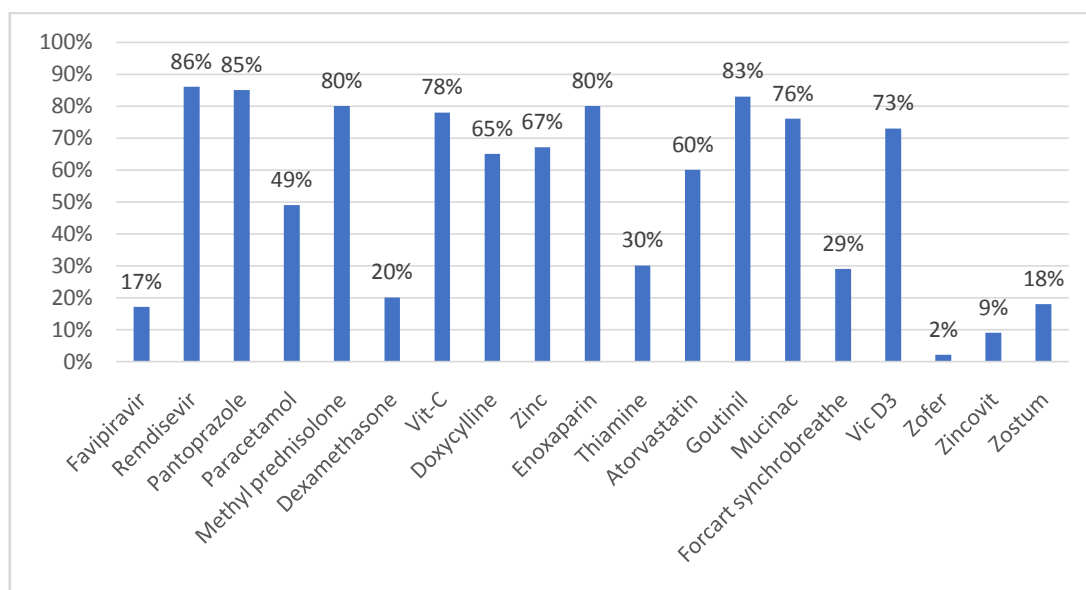
Figure 2.Result of prescription pattern analysis of age 31-40 years in covid 19 patients .

The above bar graph depicts the information about the drugs prescribed for the covid 19 patients of age between 31-40 years. The data was taken from 44 covid 19 positive patients.

In overall, Vit c has been taken by a greater number of patients. In addition to Ondansetron & Zincovit was taken least by patients.

In detail Vit c was taken by 93% patients. Remdesivir, Pantoprazole, Methyl prednisolone were taken between 80-90% of patients followed by Goutinil, Mucinac, Fora cart synchro breathe was received by 70-80% of patients . 60-70% of patients received Zinc & Enoxaparin. Nearly 50-60% of patients received Doxycycline & Atorvastatin. The least number of patients that is 0-10 % have received Favipiravir, Ondansetron , Zincovit .

DRUGS	YES	NO	%
Favipiravir	17	80	17%
Remdisevir	84	13	86%
Pantoprazole	83	14	85%
Paracetamol	48	49	49%
Methyl prednisolone	78	19	80%
Dexamethasone	19	78	20%
Vit-C	76	5	78%
Doxycylline	64	33	65%
Zinc	65	32	67%
Enoxaparin	78	19	80%
Thiamine	30	67	30%
Atorvastatin	59	38	60%
Goutinil	81	16	83%
Mucinac	74	23	76%
Forcart synchrobreathe	29	68	29%
Vic D3	71	26	73%
Zofer	2	95	2%
Zincovit	9	88	9%
Zostum	18	79	18%

Table 3. Prescription pattern analysis of age 41-50 years in covid 19 patients .
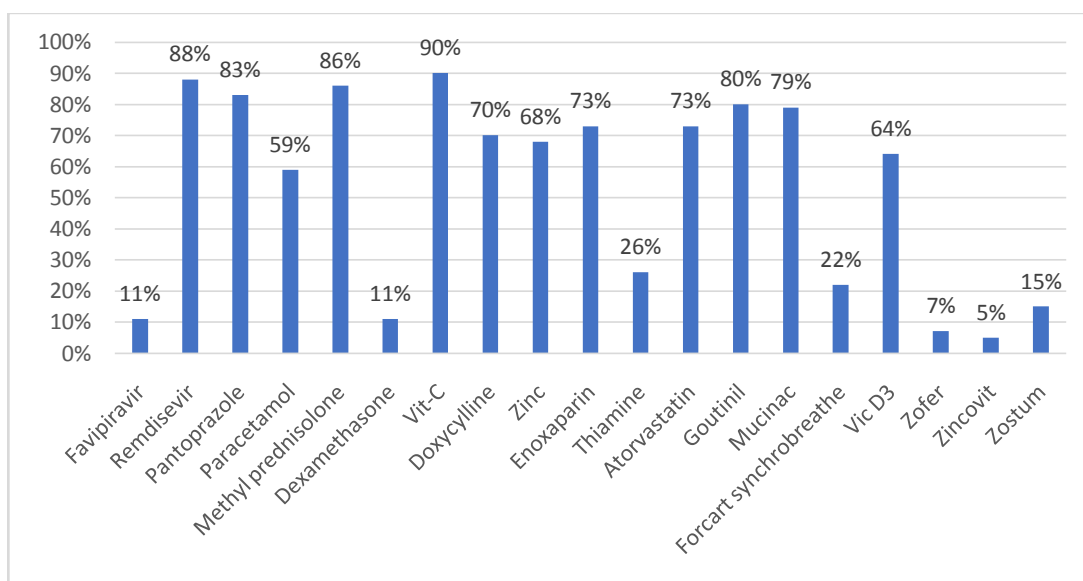
Figure 3.Result of prescription pattern analysis of age 41-50 years in covid 19 patients .

The above bar graph depicts the information about the drugs prescribed for the covid 19 patients of age between 41-50 years. The data was taken from 97 covid 19 positive patients.
In overall, Remdesivir has been taken by a greater number of patients. In addition to Ondansetron was taken least by patients.

In detail, Remdesivir was taken by 86% patients. Pantoprazole, Methyl prednisolone, Enoxaparin, Goutinil, were taken between 80-90% of patients. followed by Vit c, Vit D3, Mucinac was received by 70-80% of patients .half of the patients received Paracetamol.60-70% of people received Doxycycline , Zinc& Atorvastatin. Around 15-30% patients received Favipiravir, Dexamethasone, Thiamine, Zostum & Foracart synchro breathe. least number of patients that is 0-10 % have received Ondansetron & Zincovit .

DRUGS	YES	NO	%
Favipiravir	14	110	11%
Remdisevir	110	14	88%
Pantoprazole	104	20	83%
Paracetamol	74	50	59%
Methyl prednisolone	107	17	86%
Dexamethasone	14	110	11%
Vit-C	112	12	90%
Doxycylline	87	37	70%
Zinc	85	39	68%
Enoxaparin	91	33	73%
Thiamine	33	91	26%
Atorvastatin	91	33	73%
Goutinil	100	24	80%
Mucinac	99	25	79%
Forcart synchrobreathe	28	96	22%
Vic D3	80	44	64%
Zofer	9	115	7%
Zincovit	7	117	5%
Zostum	19	105	15%

Table 4 . Prescription pattern analysis of age 51-60 years in covid 19 patients .
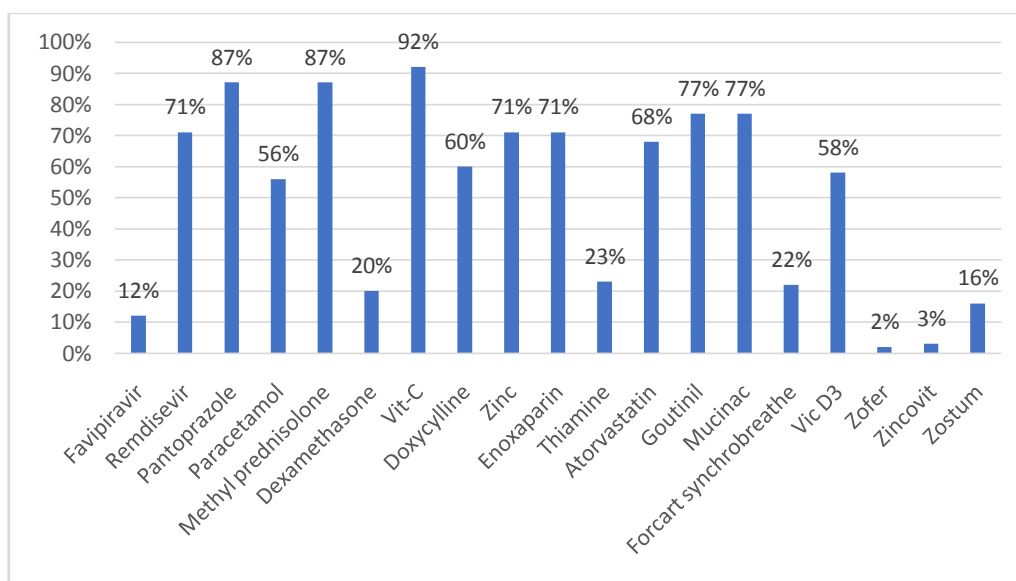
Figure 4.Result of prescription pattern analysis of age 51-60 years in covid 19 patients .

The above bar graph depicts the information about the drugs prescribed for the covid 19 patients of age between 51-60 years. The data was taken from 124 covid 19 positive patients.

In overall, Vit c has been taken by a greater number of patients.In addition to Zincovit was taken least by patients.

In detail, Vit c was taken by 90% patients. Remdesivir, Pantoprazole, Methyl prednisolone & Goutinil were taken between 80-90% of patients. followed by Doxycycline, Mucinac, Enoxaparin, Atorvastatin was received by 70-80% of patients .Paracetamol, Zinc, Vit D3 were taken between 40-60% of patients.10-30% of patients received Favipiravir,Dexamethasone, Thiamine & Fora cart synchro breathe . The least number of patients that is 0-10 % have received Ondansetron & Zincovit .

DRUGS	YES	NO	%
Favipiravir	13	90	12%
Remdisevir	89	14	71%
Pantoprazole	90	13	87%
Paracetamol	58	45	56%
Methyl prednisolone	90	13	87%
Dexamethasone	21	82	20%
Vit-C	95	8	92%
Doxycylline	62	41	60%
Zinc	74	29	71%
Enoxaparin	74	29	71%
Thiamine	24	79	23%
Atorvastatin	71	32	68%
Goutinil	80	23	77%
Mucinac	80	23	77%
Forcart synchrobreathe	23	80	22%
Vic D3	60	43	58%
Zofer	3	100	2%
Zincovit	4	99	3%
Zostum	17	86	16%

Table5. Prescription pattern analysis of age 61-70 years in covid 19 patients .
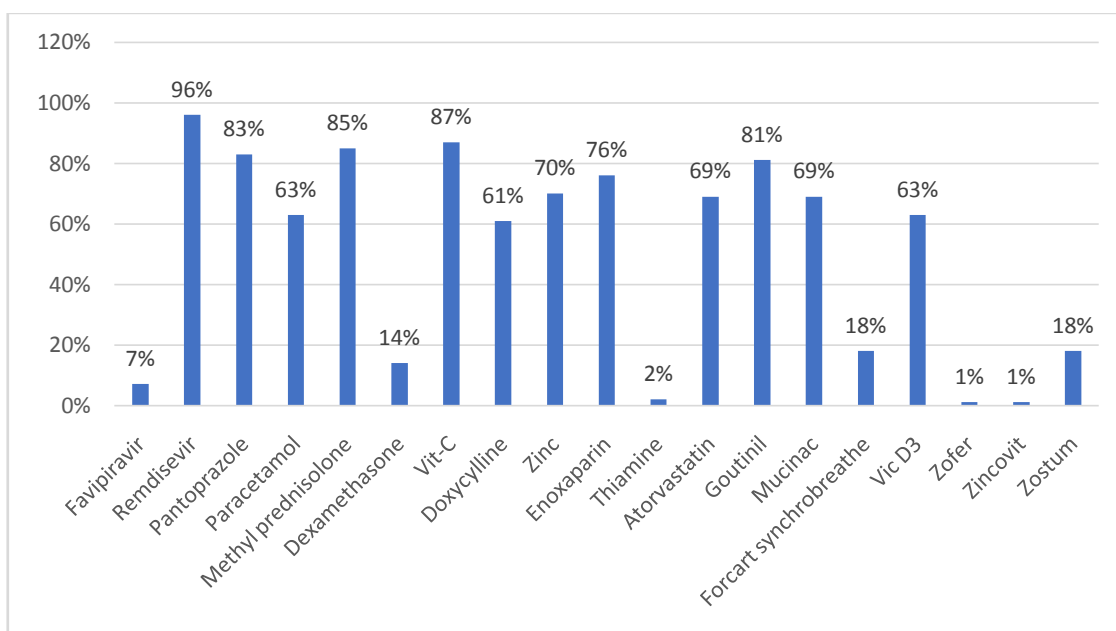
Figure 5.Result of prescription pattern analysis of age 61-70 years in covid 19 patients .

The above bar graph depicts the information about the drugs prescribed for the covid 19 patients age between 61-70 years. The data was taken from 103 covid 19 positive patients.

In overall, Vit c has been taken by a greater number of patients. In addition to Zincovit was taken least by patients, nearly 3/4th of patients received Remdesivir, Zinc & Enoxaparin.

In detail, Vit c was taken by 92% patients. Pantoprazole & Methyl prednisolone were taken between 80-90% of patients. followed by Remdesivir, Zinc, Enoxaparin, Goutinil& Mucinac was received by 70-80% of patients .50-60% of patients received Paracetamol, Doxycycline, Atorvastatin & Vit D3 .About 10-30% of patients received Favipiravir, Dexamethasone, Thiamine, Zostum & Fora cart synchro breathe. The least number of patients that is 0-10 % have received Zincovit& Zofer.

DRUGS	YES	NO	%
Favipiravir	4	51	7%
Remdisevir	53	2	96%
Pantoprazole	46	9	83%
Paracetamol	35	20	63%
Methyl prednisolone	47	8	85%
Dexamethasone	8	47	14%
Vit-C	48	7	87%
Doxycylline	34	21	61%
Zinc	39	16	70%
Enoxaparin	42	13	76%
Thiamine	11	44	2%
Atorvastatin	38	17	69%
Goutinil	45	10	81%
Mucinac	38	17	69%
Forcart synchrobreathe	10	45	18%
Vic D3	35	20	63%
Zofer	1	54	1%
Zincovit	1	54	1%
Zostum	10	45	18%

Table 6.Prescription pattern analysis of age 71-80 years in covid 19 patients .

Figure 6.Result of prescription pattern analysis of age 71-80 years in covid 19 patients .

The above bar graph depicts the information about the drugs prescribed for the covid 19 patients age between 71-80 years.The data was taken from 55 covid 19 positive patients.

In overall, Remdesivir has been taken by a greater number of patients. In addition to Thiamine, Ondansetron & Zincovit was taken least by patients, nearly 3/4th of patients received Zinc.

In detail, Remdesivir was taken by 96% patients. Pantoprazole, Methyl prednisolone, Vit c & Goutinil were taken between 80-90% of patients. followed by Pantoprazole was taken by 83%. Around 60-70% of patients were taken Paracetamol, Doxycycline, Atorvastatin, Mucinac & Vit D3.10-20% of patients received Dexamethasone, Zostum & Fora cart synchro breathe. The least number of patients that is 0-10 % have received Favipiravir, Dexamethasone, Ondansetron , Zincovit & Zostum.

DRUGS	YES	NO	%
Remdesivir	185	24	88%
paracetamol	52	157	24%
methyl Prednisalone	180	29	86%
Doxycycline	138	71	66%
Dexamethasone	180	29	86%
Vic c	194	15	92%
zinc	137	72	65%
Enoxaparin	153	56	73%
Thiamine	161	48	77%
Atorvastatin	125	84	59%
Goutinil	163	46	77%
mucinac	158	51	75%
Vit D3	124	85	59%
zofer	7	202	3%
zincovit	14	195	6%
zostum	38	171	18%
Foracart synchrobreathe	41	168	19%

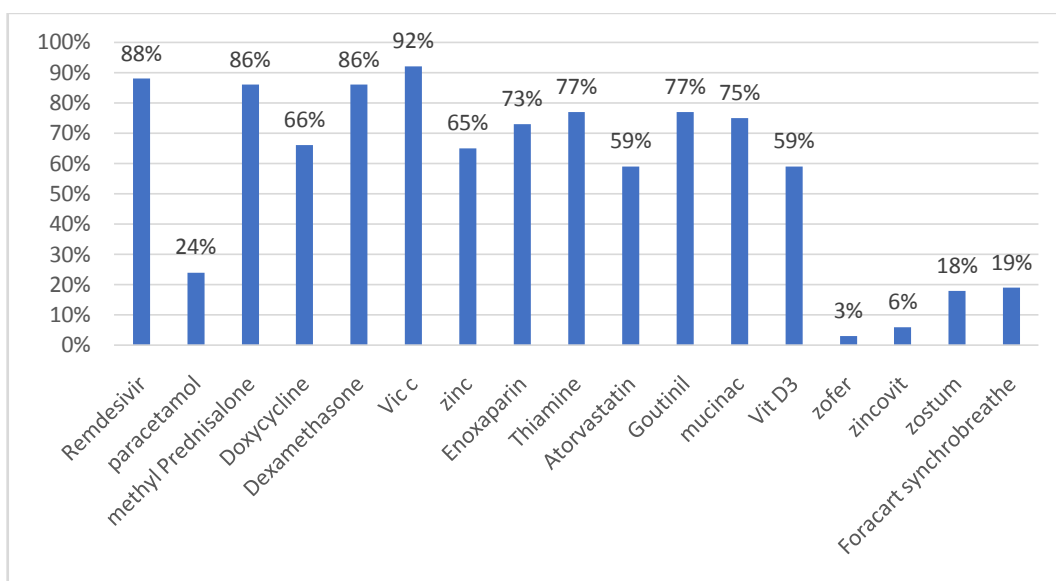**Table 7.Prescription pattern analysis of covid 19 patients with no comorbidities.**
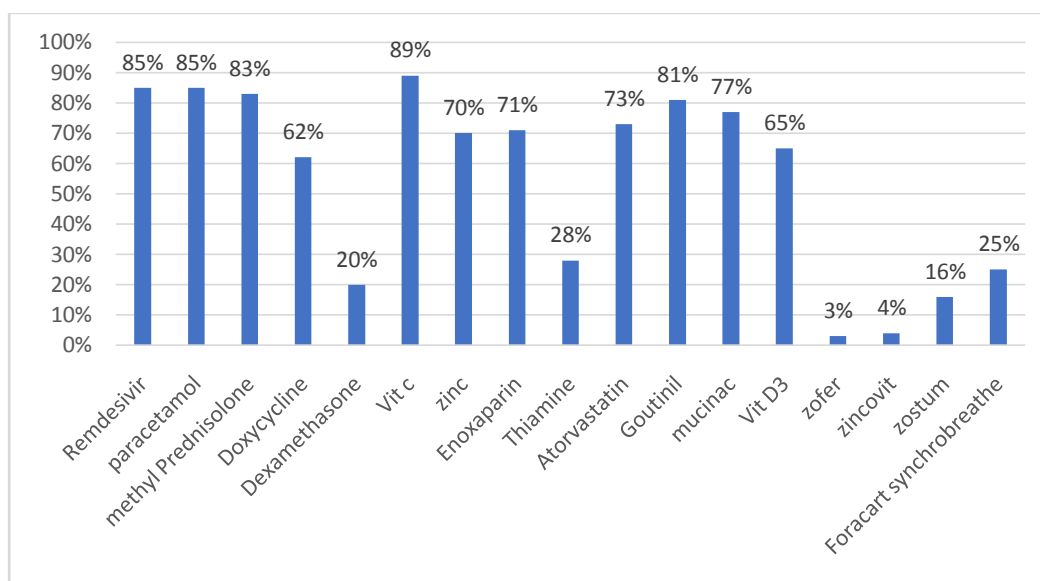
Figure 7.Result of prescription pattern analysis of covid 19 patients with no comorbidities.

The above bar graph depicts the information about the drugs prescribed for the covid 19 patients with no comorbidities.The data was taken from 209 covid 19 positive patients.

In overall, Vit c has been taken by a greater number of patients, in addition to Ondansetron was taken least by patients.

In detail, Vit c was taken by 92 % of patients. Remdesivir, Methyl prednisolone, Dexamethasone was taken by 80-90% patients. 70-80% of patients received Enoxaparin, Thiamine, Goutinil & Mucinac. Doxycycline & Zinc were taken by 60-70% of patients. Atorvastatin & Vit D3 was taken by 50-60% of patients.10-30% of patients received Paracetamol, Zostum, Fora cart synchro breathe. The least number of patients that is 0-10 % have received Ondansetron &Zincovit.

DRUGS	YES	NO	%
Remdesivir	179	30	85%
paracetamol	179	30	85%
methyl Prednisolone	174	35	83%
Doxycycline	130	79	62%
Dexamethasone	43	166	20%
Vit c	187	22	89%
zinc	147	62	70%
Enoxaparin	150	59	71%
Thiamine	59	150	28%
Atorvastatin	154	55	73%
Goutinil	171	38	81%
mucinac	162	47	77%
Vit D3	137	72	65%
zofer	7	202	3%
zincovit	10	199	4%
zostum	35	174	16%
Foracart synchrobreathe	53	156	25%

Table 8. Prescription pattern analysis of covid 19 patients withcomorbidities.

Figure 8. Result of prescription pattern analysis of covid 19 patients with comorbidities.

The above bar graph depicts the information about the drugs prescribed for the covid 19 patients with comorbidities. The data was taken from 209 covid 19 positive patients.

In overall, Vit c has been taken by a greater number of patients, in addition to Ondansetron was taken least by patients.

In detail, Remdesivir, Paracetamol, Methyl prednisolone, Goutinil & Vit c were taken between 80-90% of patients. followed by Mucinac, Zinc, Enoxaparin, Atorvastatin was received by 70-80% of patients. 60-70% of patients received Doxycycline & Vit D3 . About 10-30% of patients were received Dexamethasone, Thiamine, Zostum & Fora cart synchro breathe. The least number of patients that is 0-10 % have received Ondansetron & Zincovit.

DRUGS	YES	NO	%
Fever	186	51	78%
Cough & cold	160	77	67%
Shortness of Breath	152	85	64%
loss taste &smell	8	229	3%
myalgia	29	208	12%
Weekness	67	170	28%
Headache	4	233	1%
Chest discomfort	16	221	6%
Dysepnea	11	226	4%
loss of appetite	9	228	3%
Weight loss	3	234	1%
nausea	9	228	3%
sore throat	10	227	4%

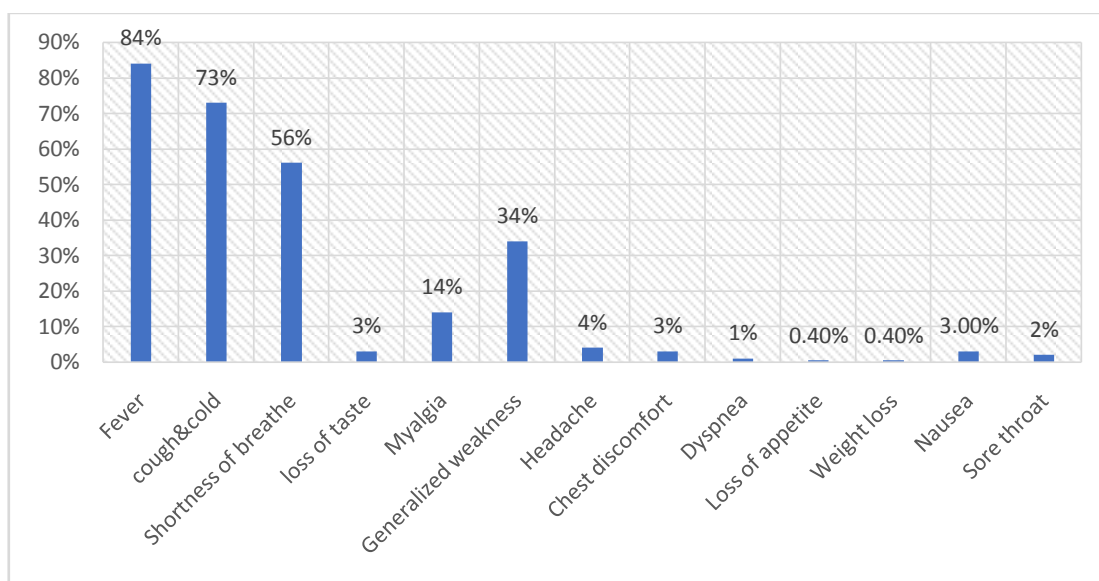**Table 9. Symptoms of covid 19 patients with comorbidities.**
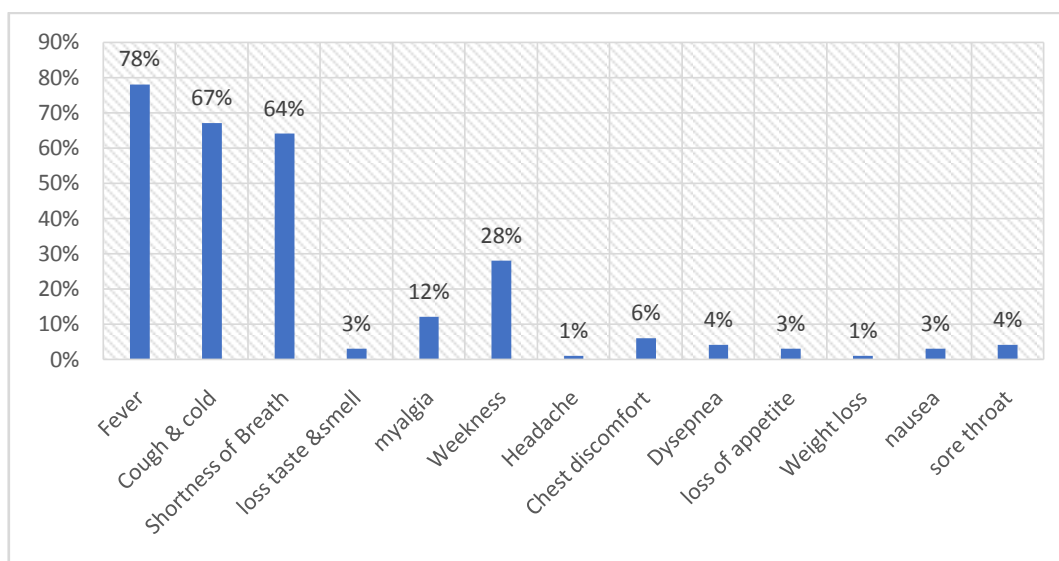
Figure 9.Result of symptoms of covid 19 patients with comorbidities.

The above bar graph depicts the information about the symptoms in covid 19 positive patients with comorbidities . The data was taken from 237 covid 19 positive patients.

In overall, Fever was the most common symptom among all the symptoms. Headache & Weight loss are the less common symptoms.

In detail, 78% of patients experienced Fever. About 65-70% of patients experienced with Cough & Cold. 10-30% of patients faced with Myalgia & Weakness . 0-10% of patients experienced with Loss of taste & smell , Headache, Chest discomfort , Dyspnoea, Loss of appetite, Weight loss, Nausea & Sore throat.

DRUGS	YES	NO	%
Fever	176	33	84%
cough&cold	153	56	73%
Shortness of breathe	118	91	56%
loss of taste	7	202	3%
Myalgia	30	179	14%
Generalized weakness	73	136	34%
Headache	10	199	4%
Chest discomfort	7	202	3%
Dyspnea	3	206	1%
Loss of appetite	1	208	0.40%
Weight loss	1	208	0.40%
Nausea	8	201	3.00%
Sore throat	5	204	2%

Table 10. Symptoms of covid 19 patients with no comorbidities.

Figure 10.Result of symptoms of covid 19 patients with no comorbidities.

The above bar graph depicts the information about the symptoms in covid 19 positive patients with no comorbidities . The data was taken from 209 covid 19 positive patients.
In overall, Fever was the most common symptom among all the symptoms. Loss of appetite & Weight loss are the less common symptoms.

In detail, 84% of patients experienced Fever. 73% of patients experienced Cough & Cold . 56% of patients faced with Shortness of breath. 34% of patients had Generalised weakness and 14% of patients had Myalgia .0-10% of patients experienced with Loss of taste, Headache, Chest discomfort ,Dyspnoea, Loss of appetite, Weight loss, Nausea & Sore throat.

COMORBIDITIES	YES	NO	%
Hypertension	191	46	80%
Type 2 DM	147	90	62%
Bronchial asthama	5	232	2%
Cerebro Vascular Accidents(CVA)	7	230	2%
Coronary Artery Diseases(CAD)	6	231	2%

Table 11. Comorbidities present in covid 19 patients.
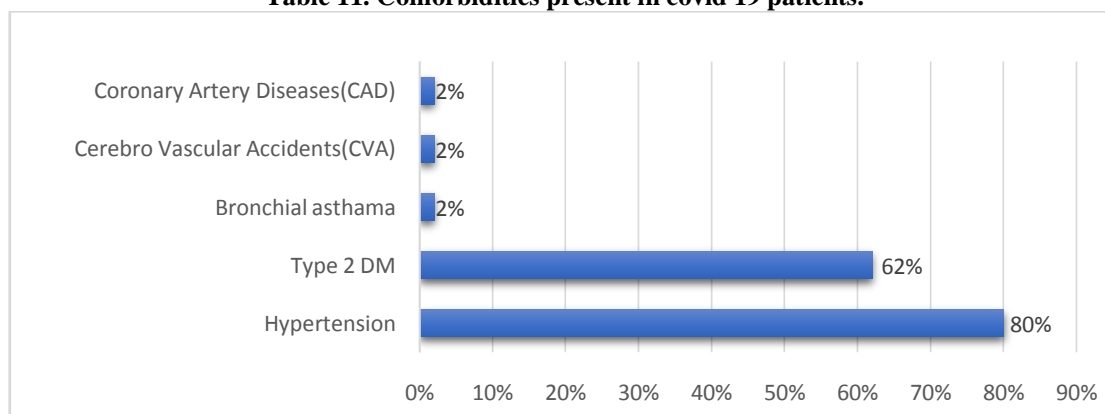
Figure 11.Result of comorbidities present in covid 19 patients.

The above bar graph depicts the information about comorbidities(coronary artery diseases; cerebrovascular accidents; bronchial asthma ;type 2 dm ;hypertension)   present in the covid 19 patients.The data was taken from 237 covid 19 positive patients.

In overall, hypertension was the most common disease among all the comorbidities.
In detail 80% of patients have hypertension; . 62% of patients have type2 DM;   2% of patients have CVA; 2% of patients have bronchial asthma; and 2% of patients have CAD.

AGE	Day of recovery
20-30yrs	7
31-40yrs	5
41-50yrs	6
51-60yrs	6
61-70yrs	6
71-80yrs	7

Table 12. Days of recovery in covid 19 patients.
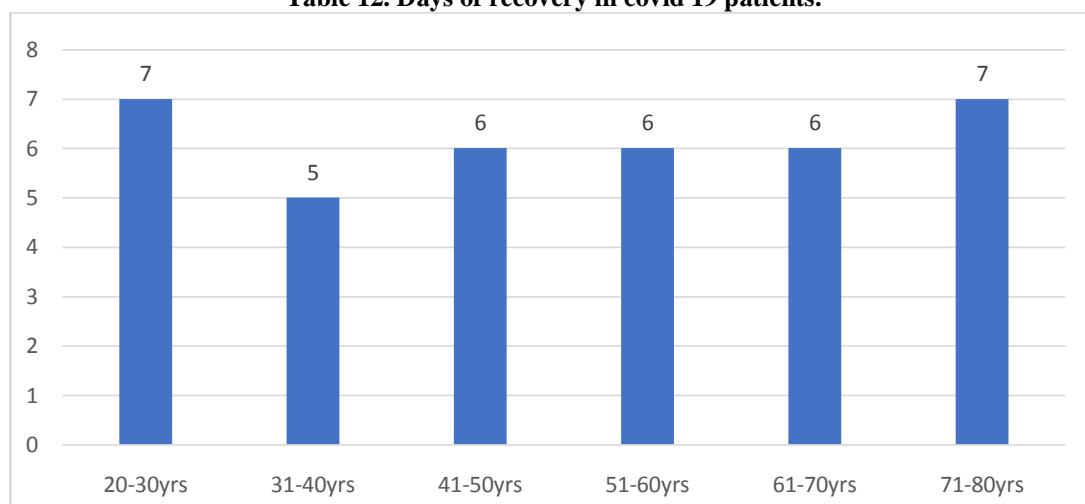
Figure 12.Result of Days of recovery in covid 19 patients.

The above bar graph depicts the information about days of recovery in the covid 19 patients.
In detail,   20-30years & 71-80 years age group patients are recovered in 7 days, 31-40years age group patients are recovered in 5 days, 41-50years,51-60years &61-70 years age group patients are recovered in 6 days.

Row Labels	Count of Gender
☐ 20-30yrs	27
Female	7
Male	20
☐ 31-40yrs	44
Female	7
Male	37
☐ 41-50yrs	97
Female	22
Male	75
☐ 51-60yrs	124
Female	37
Male	87
☐ 61-70yrs	103
Female	30
Male	73
☐ 71-80yrs	55
Female	13
Male	42
Grand Total	**450**

Table 13. Gender distribution of covid 19 patients.
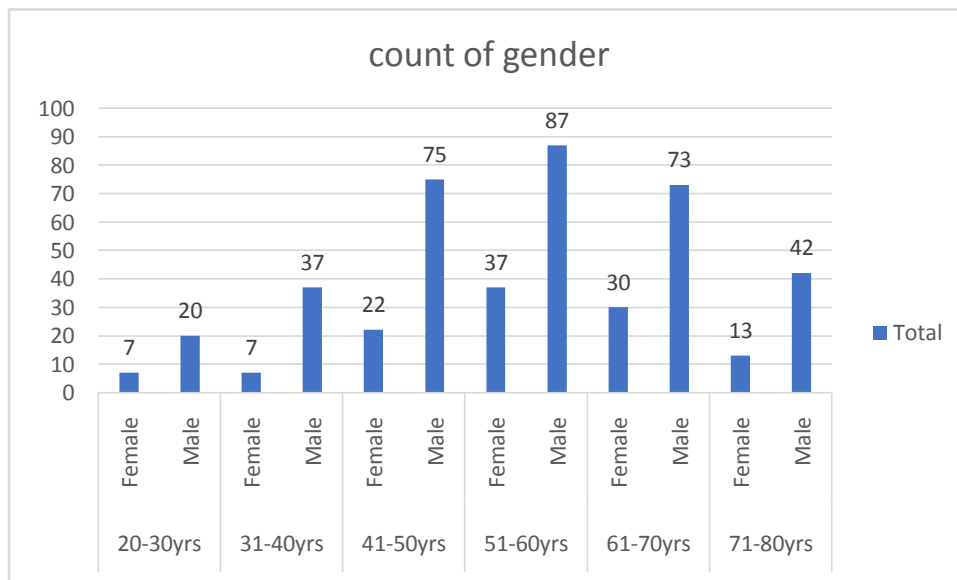
Figure 13.Result of Gender distribution of covid 19 patients.

GENDER	COUNT	PERCENTAGE
Female	116	25.8
Male	334	74.2
Total	450	100

Figure 14. Gender distribution of covid 19 patients.
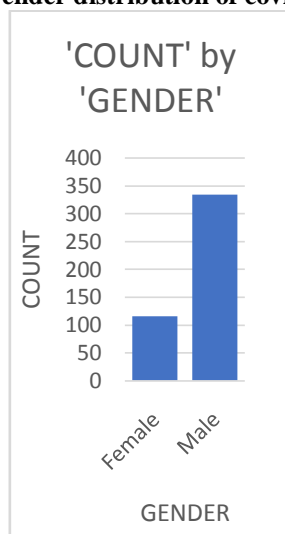
Figure 14.Result of Gender distribution of covid 19 patients.

The above bar graph depicts the information about count of gender in the covid 19 patients in different age groups.The data was taken from 450 covid 19 positive patients.
In overall, males are more than females.

In detail, in between 20-30years of age group there are 27 patients of which 20 are males & 7 are females, , in between 31-40 years of age group there are 44 patients of which 37 are males & 7 are females, , in between 41-50years of age group there are 97 patients of which 75 are males & 22 are females , in between 51-60 years of age group there are 124 patients of which 87 are males & 37 are females , in between 61-70years of age group there are 103 patients of which 73 are males & 30 are females , in between 71-80years of age group there are 55 patients of which 42 are males & 13 are females.

Row Labels	Count of Type of Discharge
⊟ **20-30yrs**	**27**
LAMA Discharge	3
Normal Discharge	24
⊟ **31-40yrs**	**44**
LAMA Discharge	3
Normal Discharge	41
⊟ **41-50yrs**	**97**
Discharge on Request	5
Expired	3
LAMA Discharge	4
Normal Discharge	85
⊟ **51-60yrs**	**124**
LAMA Discharge	12
Normal Discharge	112
⊟ **61-70yrs**	**103**
Discharge on Request	3
Expired	5
LAMA Discharge	5
Normal Discharge	90
⊟ **71-80yrs**	**54**
Expired	1
LAMA Discharge	2
Normal Discharge	51
(blank)	
Grand Total	**449**

Figure 15.Result of Type of discharge of covid 19 patients.
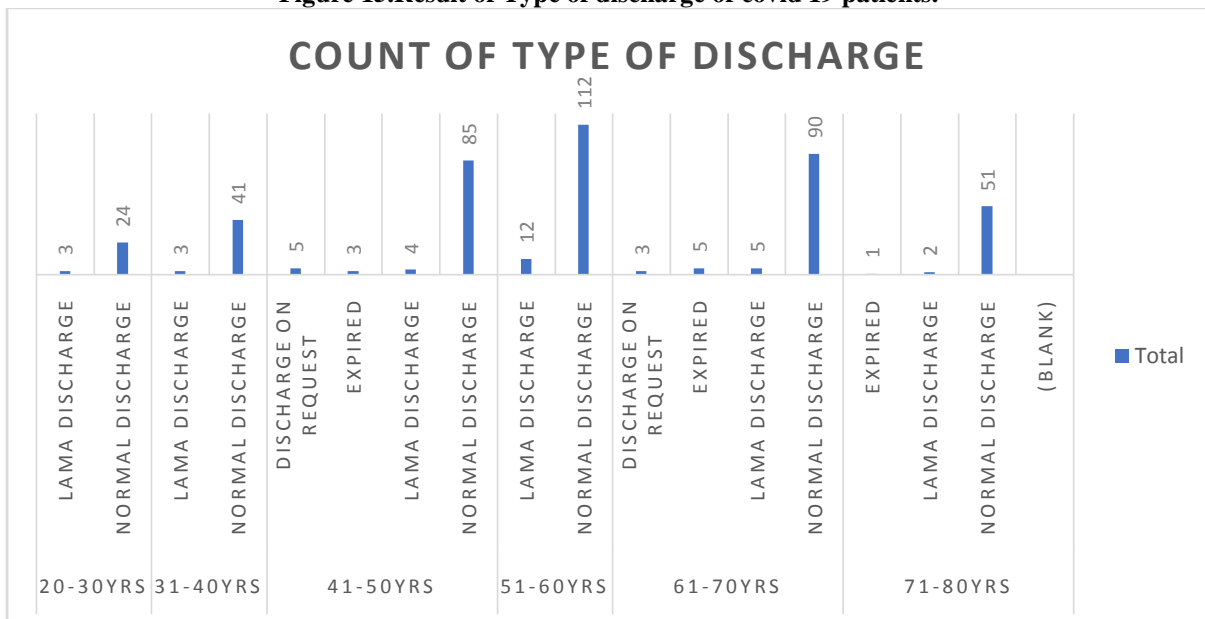
Figure 15.Result of Type of discharge of covid 19 patients.

The above bar graph depicts the information about count on type of discharge (normal discharge; LAMA discharge ; discharge on request; expired) in the covid 19 patients in

different age groups.The data was taken from 449 covid 19 positive patients.

In overall, patients discharged on normal discharge are more than LAMA discharge & discharge on request .

In detail, in between 20-30years of age group there are 27 patients discharged of which 24 are normal discharge & 3 are LAMA discharge , in between 31-40 years of age group there are 44 patients discharged of which 41 are normal discharge & 3 are LAMA discharge , in between 41-50years of age group there are 97 patients discharged of which 85 are normal discharge ,5 are discharge on request, 4 are LAMA discharge& 3 are expired, in between 51-60 years of age group there are 124 patients discharged of which 112 are normal discharge,12 are LAMA discharge , in between 61-70years of age group there are 103 patients discharged of which 90 are normal discharge,5 are expired,5 are LAMA discharge &3 are discharge on request, in between 71-80years of age group there are 54 patients discharge of which 51 are normal discharge,2 are LAMA discharge, 1 is expired.

IV. DISCUSSION

Multiple comorbidities are associated with the severity of covid 19 disease progression.

According to Adekunle Sanyaolu et al.[10] ; cardiovascular comorbid condition is lesser which is like our study ; patients with type 2 diabetes mellitus were also more likely to have increases severity of covid 19 in their study ; but in our study type 2 diabetes mellitus is second more likely to have increased severity of covid 19. Hypertension in this study, the smoking status of patients and severity of covid 19 were also study. Only one study was found to have an association with smoking and severity course of covid 19[11].After this study was removed ; there was no significant association with smoking and severe covid 19 diseases. Once again, in sufficient sample size and in adequate time have led to limitation in data collected[12].

V. CONCLUSION

Over 180 countries have been affected by covid 19 resulting in mass death worldwide. As cases evolve globally; It has been noted that person with underlying chronic illness is more likely to contact with virus and become severely ill. Due to covid 19 being a relatively new virus ; the data available is limited. However, patients with comorbidities have more deteriorating outcomes compared with patients without. Therefore, patients with comorbidities should take all necessary precautions to avoid getting infection with covid 19, as they usually have worst prognosis. These precautions include regular hand washing with soap and water/use of alcohol-based hand sanitizers; limiting person to person contact and practice in social distance; wearing face mask in public places and over all limited going to public areas currently unless it is necessary. Early vaccination can reduce the occurrence of covid 19.

VI. ACKNOWLEDGEMENT

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